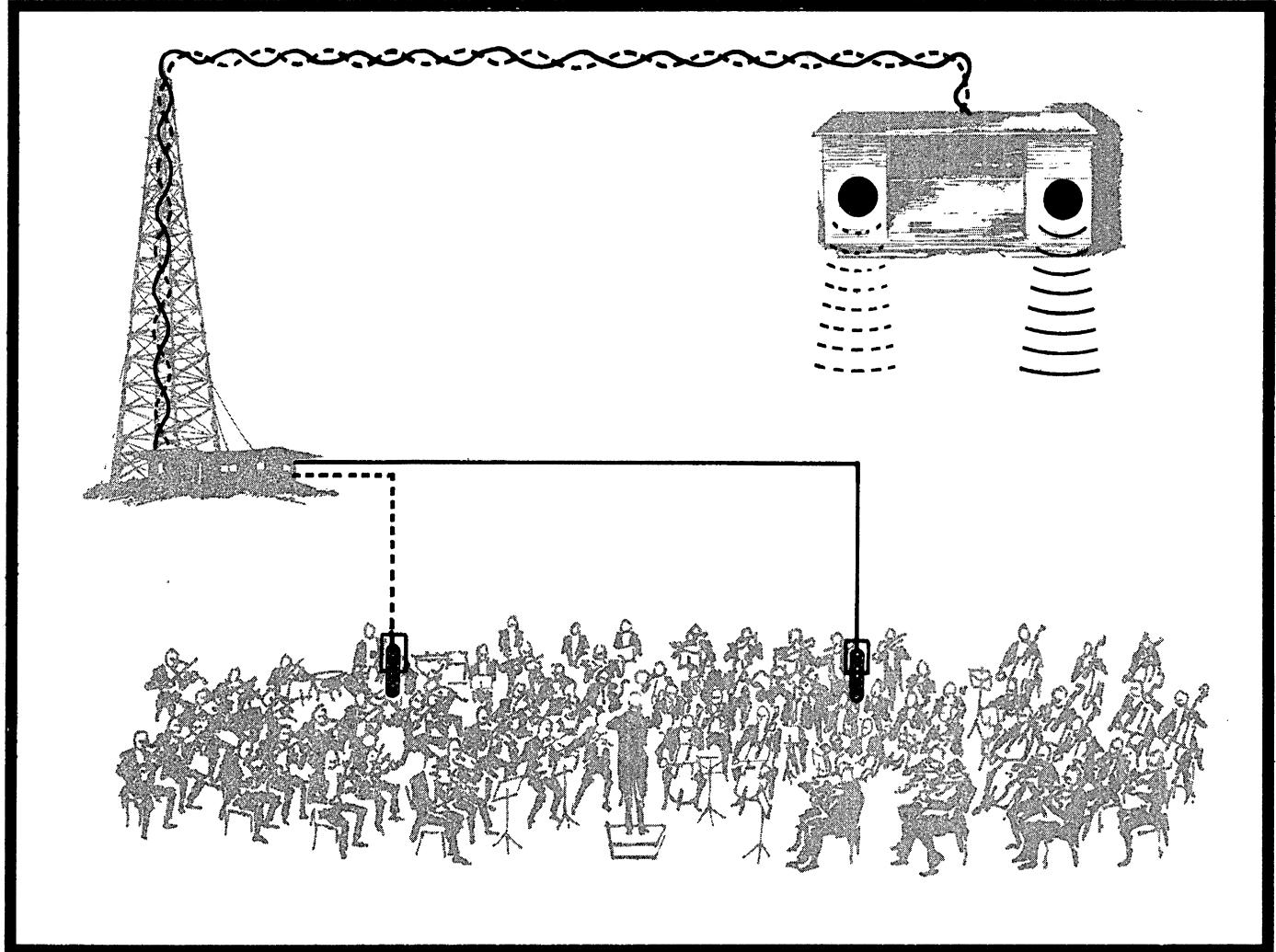


**ZENITH**  
®

# SERVICE MANUAL



**1964 HIGH FIDELITY  
AND STEREO FM MODELS**

**ZENITH RADIO CORPORATION  
6001 DICKENS AVENUE • CHICAGO ILLINOIS, 60639**

**HF12**

**PRICE 75 CENTS**

# INDEX

MODEL	SCHEMATIC PAGE	TUBE LAYOUT PAGE	CHASSIS PARTS LIST PAGE
MLT 15	52-54	53-55	86-87-88-89-90-91
ZP2	30	30	75
LP8	31	31	75
LPS45	32	32	76
LPS50	33	33	78
KPS70-1	34	34	101-102
LPS75	35	35	79
LPS80-3	36	36	81
LPM95-3	37	38	91-92-93
ST1951-3	39	41	79
MT1951-3	40	41	77-78-83-84-85
MT1971-3	42-43-52-54-68-69	41-53-55	80-86-87-88-89-90-91
SL2420-3	39	41	79
RL2420-3	40-46	41-47	77-78-82-83
ML2420-3	40-48	41-49	77-78-83-84-85
SL2501-3	39	41	79
RL2601-3	40-46	41-47	77-78-82-83
ML2601-3	40-48	41-49	77-78-83-84-85
RL2602-3	40-46	41-47	77-78-82-83
ML2602-3	40-48	41-49	77-78-83-84-85

# INDEX

MODEL	SCHEMATIC PAGE	TUBE LAYOUT PAGE	CHASSIS PARTS LIST PAGE
RL2603-3	40-46	41-47	77-78-82-83
ML2603-3	40-48	41-49	77-78-83-84-85
ML2605-3	43-45-52-54-68-69	41-53-55	81-82-86-87-88-89-90-91
ML2606-3	43-45-52-54-68-69	41-53-55	81-82-86-87-88-89-90-91
ML2607-3	43-45-52-54-68	41-53-55	81-82-86-87-88-89-90-91
ML2608-3	52-54-60-61-68-69	53-55-62	86-87-88-89-90-93-94
ML2610-3	52-54-60-61-68-69	53-55-62	86-87-88-89-90-93-94
ML2636-3	52-54-60-61-68-69	53-55-62	86-87-88-89-90-93-94
ML2670-3	57-58-68-69	56-59	88-89-98-99-100
ML2675-3	57-58-68-69	56-59	88-89-98-99-100
ML2685-3	57-58-68-69	56-59	88-89-98-99-100
RL2784-3	50-67	51	85-86
ML2784-3	63-67-68	64	94-95
ML2785-3	65-67-68-69	66	96-97
ML2786-3	65-67-68-69	66	96-97
7000-3	44-52-54-68-69	41-53-55	80-81-86-87-88-89-90-91
7200-3	52-54-60-61-68-69	53-55-62	86-87-88-89-90-91-93-94
7500-3	57-58-68-69	56-59	88-89-98-99-100
KR102	69		101
KR105	69		101

# FEATURES OF HIGH FIDELITY & STEREO FM MODELS

MODEL NO.	CABINET				CHASSIS			SPEAKER	
	STYLE	MATERIAL	FINISH	COLOR	MODEL	TYPE	EIA POWER OUTPUT	SIZE (IN.)	MAGNET (WT. OZ.)
MLT15			DROP - IN - TUNER		9L20 or 8LIT20	AM-FM Tuner	---	---	---
ZP2B	Table (w/handle) (lift lid)	Plastic	Textured Plastic	Blue & White	1L20	1 Tube Phono Only	---	4	.68
ZP2L	Table (w/handle) (lift lid)	Plastic	Textured Plastic	Beige & White	1L20	1 Tube Phono Only	---	4	.68
ZP2F	Table (w/handle) (lift lid)	Plastic	Textured Plastic	Green & White	1L20	1 Tube Phono Only	---	4	.68
ZP2V	Table (w/handle) (lift lid)	Plastic	Textured Plastic	Red & White	1L20	1 Tube Phono Only	---	4	.68
ZP2P	Table (w/handle) (lift lid)	Plastic	Textured Plastic	Yellow & White	1L20	1 Tube Phono Only	---	4	.68
LP8B	Table (w/handle) (hinged panel)	Wood	Plastic Coated Paper	Lt. Blue & Ivory	1L21	1 Tube Phono Only	---	4 x 6	2.3
LP8L	Table (w/handle) (hinged panel)	Wood	Plastic Coated Paper	Sea Shell & Off White	1L21	1 Tube Phono Only	---	4 x 6	2.3
LPS45L	Table (w/handle) (hinged speaker) (enclosure)	Wood	Plastic Coated Paper	Sea Shell & Off White	2L20	2 Tube Phono Only	---	2-4 x 6	1.47
LPS45J	Table (w/handle) (hinged speaker) (enclosure)	Wood	Plastic Coated Paper	Brown & White	2L20	2 Tube Phono Only	---	2-4 x 6	1.47
LPS50L	Table (w/handle) (hinged speaker) (enclosure)	Wood	Plastic Coated Paper	Tan & White	3L03	3 Tube Phono Only	---	2-5 x 7	1.0
LPS50C	Table (w/handle) (hinged speaker) (enclosure)	Wood	Plastic Coated Paper	Charcoal Gray & Light Gray	3L03	3 Tube Phono Only	---	2-5 x 7	1.0
KPS70-1	Table (w/handle) (hinged speaker) (enclosure)	Wood	Plastic Coated Cloth	Charcoal Gray & Planked Walnut	Waters-Conley	3 Tube Phono Only	---	2-6 1/2 2-4	2.15 .68
LPS75W	Table (w/handle) (hinged speaker) (enclosure)	Wood	Plastic Coated Paper	Beige & Walnut	3L05	3 Tube Phono Only	---	2-6 1/2 2-4	3.16 .46

# FEATURES OF HIGH FIDELITY & STEREO FM MODELS

RECORD CHANGER				CONTROL PANEL	INDICATOR LIGHT	TYPE OF IDENTIFICATION AND SPECIAL FEATURES	RECORD STORAGE	RADIAL SOUND SPEAKER
TYPE	MOUNTING	CARTRIDGE	STYLUS					
---	---	---	---	Die-Cast Escutcheon	No	ZENITH Crest	---	---
Manual Player	Shelf	142-95	Sapphire Sapphire	None	No	ZENITH Crest	---	None
Manual Player	Shelf	142-95	Sapphire Sapphire	None	No	ZENITH Crest	---	None
Manual Player	Shelf	142-95	Sapphire Sapphire	None	No	ZENITH Crest	---	None
Manual Player	Shelf	142-95	Sapphire Sapphire	None	No	ZENITH Crest	---	None
Manual Player	Shelf	142-95	Sapphire Sapphire	None	No	ZENITH Crest	---	None
169-191	Shelf	142-125	Sapphire Sapphire	Hot Stamped on Cabinet	No	ZENITH Stereophonic Crest	None	None
169-191	Shelf	142-125	Sapphire Sapphire	Hot Stamped on Cabinet	No	ZENITH Stereophonic Crest	None	None
169-192	Hinged Panel	142-124	Sapphire Sapphire	Hot Stamped on Cabinet	No	ZENITH Stereophonic Crest	None	None
169-192	Hinged Panel	142-124	Sapphire Sapphire	Hot Stamped on Cabinet	No	ZENITH Stereophonic Crest	None	None
169-218	Hinged Panel	142-133 or 142-144	Sapphire Sapphire	Metal Plate	No	ZENITH Stereophonic Crest	None	None
169-213	Hinged Panel	142-133 or 142-144	Sapphire Sapphire	Metal Plate	No	ZENITH Stereophonic Crest	None	None
169-205	Hinged Panel	142-126	Sapphire Sapphire	Metal Plate	No	ZENITH Stereophonic Crest	None	None
169-216	Hinged Panel	142-140	Sapphire Sapphire	Metal Plate	No	ZENITH Stereophonic Crest	None	None

# FEATURES OF HIGH FIDELITY & STEREO FM MODELS

MODEL NO.	CABINET				CHASSIS			SPEAKER	
	STYLE	MATERIAL	FINISH	COLOR	MODEL	TYPE	EIA POWER OUTPUT	SIZE (IN.)	MAGNET (WT. OZ.)
LPS75C	Table (w/handle) (hinged speaker) (enclosure)	Wood	Plastic Coated Paper	Charcoal Gray Metallic Finish	3L05	3 Tube Phono Only	---	2-6 1/2 2-4	.316 .46
LPS80W3	Table (w/handle) (hinged speaker) (enclosure)	Wood	Plastic Coated Cloth	Walnut & Beige	4L24	4 Tube Phono Only	5W	2-3 1/2 2-5 1/4 1-3 x 14	.85 1.33 3.16
LPS80C3	Table (w/handle) (hinged speaker) (enclosure)	Wood	Plastic Coated Cloth	Med. Gray & Dark Gray	4L24	4 Tube Phono Only	5W	2-3 1/2 2-5 1/4 1-3 x 14	.85 1.33 3.16
LPM95W3	Table (w/handle) (hinged speaker) (enclosure)	Wood	Plastic Coated Cloth	Walnut & Beige	10L02	Phono-AM-FM	5W	2-3 1/2 2-8	.68 4.8
LPM95L3	Table (w/handle) (hinged speaker) (enclosure)	Wood	Plastic Coated Cloth	Med. Gray & Dark Gray	10L02	Phono-AM-FM	5W	2-3 1/2 2-8	.68 4.8
ST1951W3	Console (lift lid)	Wood	Wood	Walnut	3L04	Phono Only	5W	4-3 1/2 2-6 x 9	.46 3.16
ST1951R3	Console (lift lid)	Wood	Wood	Mahogany	3L04	Phono Only	5W	4-3 1/2 2-6 x 9	.46 3.16
MT1951W3	Console (lift lid)	Wood	Wood	Walnut	3L02 7L01	Phono-AM-FM	5W	4-3 1/2 2-6 x 9	.46 3.16
MT1951R3	Console (lift lid)	Wood	Wood	Mahogany	3L02 7L01	Phono-AM-FM	5W	4-3 1/2 2-6 x 9	.46 3.16
MT1971W3	Console (lift lid)	Wood	Wood	Walnut	4L21 9L20 or 8L1T20	Phono-AM-FM	8.5W	4-3 1/2 2-4 2-10	.46 68 3.16
SL2420W3	Console (sliding panels)	Wood	Wood	Walnut	3L04	Phono Only	5W	2-3 1/2 2-6 x 9	.46 3.16
SL2420R3	Console (sliding panels)	Wood	Wood	Mahogany	3L04	Phono Only	5W	2-3 1/2 2-6 x 9	.46 3.16
SL2420H3	Console (sliding panels)	Wood	Wood	Cherry	3L04	Phono Only	5W	2-3 1/2 2-6 x 9	.46 3.16
SL2420M3	Console (sliding panels)	Wood	Wood	Maple	3L04	Phono Only	5W	2-3 1/2 2-6 x 9	.46 3.16
RL2420W3	Console (sliding panels)	Wood	Wood	Walnut	3L02 6L01	Phono-AM-FM	5W	2-3 1/2 2-6 x 9	.46 3.16
RL2420R3	Console (sliding panels)	Wood	Wood	Mahogany	3L02 6L01	Phono-AM-FM	5W	2-3 1/2 2-6 x 9	.46 3.16
RL2420H3	Console (sliding panels)	Wood	Wood	Cherry	3L02 6L01	Phono-AM-FM	5W	2-3 1/2 2-6 x 9	.46 3.16
RL2420M3	Console (sliding panels)	Wood	Wood	Maple	3L02 6L01	Phono-AM-FM	5W	2-3 1/2 2-6 x 9	.46 3.16

# FEATURES OF HIGH FIDELITY & STEREO FM MODELS

RECORD CHANGER				CONTROL PANEL	INDI-CATOR LIGHT	TYPE OF IDENTIFICATION AND SPECIAL FEATURES	RECORD STORAGE	RADIAL SOUND SPEAKER
TYPE	MOUNTING	CARTRIDGE	STYLUS					
169-216	Hinged Panel	142-140	Sapphire Sapphire	Metal Plate	No	ZENITH Stereophonic Crest	None	None
169-220	Shelf	142-141	Diamond Sapphire	Die-Cast Escutcheon	No	ZENITH Stereophonic High Fidelity 5 Speakers	None	None
169-221	Shelf	142-141	Diamond Sapphire	Die-Cast Escutcheon	No	ZENITH Stereophonic High Fidelity 5 Speakers	None	None
169-219	Hinged Panel	142-141	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest	None	None
169-219	Hinged Panel	142-141	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest	None	None
169-208	Shelf	142-141	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest	Yes	♦
169-208	Shelf	142-141	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest	Yes	♦
169-208	Shelf	142-141	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio	None	♦
169-208	Shelf	142-141	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio	None	♦
169-208	Shelf	142-141	Diamond Sapphire	Die-cast Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest	Yes	KR102
169-209	Shelf	142-127 or 142-137	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest	None	♦
169-209	Shelf	142-127 or 142-137	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest	None	♦
169-209	Shelf	142-127 or 142-137	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest	None	♦
169-209	Shelf	142-127 or 142-137	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest	None	♦
169-209	Shelf	142-127 or 142-137	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest	None	♦
169-209	Shelf	142-127 or 142-137	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest	None	♦
169-209	Shelf	142-127 or 142-137	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest	None	♦

# FEATURES OF HIGH FIDELITY & STEREO FM MODELS

MODEL NO.	CABINET				CHASSIS			SPEAKER	
	STYLE	MATERIAL	FINISH	COLOR	MODEL	TYPE	EIA POWER OUTPUT	SIZE (IN.)	MAGNET (WT. OZ.)
ML2420W3	Console (sliding panels)	Wood	Wood	Walnut	3L02 7L01	Phono-AM-FM	5W	2-3 1/2 2-6 x 9	.85 3.16
ML2420R3	Console (sliding panels)	Wood	Wood	Mahogany	3L02 7L01	Phono-AM-FM	5W	2-3 1/2 2-6 x 9	.85 3.16
ML2420H3	Console (sliding panels)	Wood	Wood	Cherry	3L02 7L01	Phono-AM-FM	5W	2-3 1/2 2-6 x 9	.85 3.16
ML2420M3	Console (sliding panels)	Wood	Wood	Maple	3L02 7L01	Phono-AM-FM	5W	2-3 1/2 2-6 x 9	.85 3.16
SL2501W3	Console (lift lid)	Wood	Wood	Walnut	3L04	Phono Only	5W	4-3 1/2 2-6 x 9	.46 3.16
SL2501R3	Console (lift lid)	Wood	Wood	Mahogany	3L04	Phono Only	5W	4-3 1/2 2-6 x 9	.46 3.16
SL2501E3	Console (lift lid)	Wood	Wood	Oak	3L04	Phono Only	5W	4-3 1/2 2-6 x 9	.46 3.16
RL2601W2	Console (lift lid)	Wood	Wood	Walnut	3L02 6L01	Phono-AM-FM	5W	4-3 1/2 2-6 x 9	.46 3.16
RL2601R3	Console (lift lid)	Wood	Wood	Mahogany	3L02 6L01	Phono-AM-FM	5W	4-3 1/2 2-6 x 9	.46 3.16
ML2601W3	Console (lift lid)	Wood	Wood	Walnut	3L02 7L01	Phono-AM-FM	5W	4-3 1/2 2-6 x 9	.46 3.16
ML2601R3	Console (lift lid)	Wood	Wood	Mahogany	3L02 7L01	Phono-AM-FM	5W	4-3 1/2 2-6 x 9	.46 3.16
ML2601E3	Console (lift lid)	Wood	Wood	Oak	3L02 7L01	Phono-AM-FM	5W	4-3 1/2 2-6 x 9	.46 3.16
RL2602M3	Console (lift lid)	Wood	Wood	Maple	3L02 6L01	Phono-AM-FM	5W	4-3 1/2 2-6 x 9	.46 3.16
ML2602M3	Console (lift lid)	Wood	Wood	Maple	3L02 7L01	Phono-AM-FM	5W	4-3 1/2 2-6 x 9	.46 3.16
RL2603H3	(Console lift lid)	Wood	Wood	Cherry	3L02 6L01	Phono-AM-FM	5W	4-3 1/2 2-6 x 9	.46 3.16
ML2603H3	Console (lift lid)	Wood	Wood	Cherry	3L02 7L01	Phono-AM-FM	5W	4-3 1/2 2-6 x 9	.46 3.16
ML2605R3	Console (lift lid)	Wood	Wood	Mahogany	5L29 9L20 or 8L1T20	Phono-AM-FM	10W	4-3 1/2 2-5 2-12	.46 1.47 6.8
ML2605M3	Console (lift lid)	Wood	Wood	Maple	5L29 9L20 or 8L1T20	Phono-AM-FM	10W	4-3 1/2 2-5 2-12	.46 1.47 6.8
ML2606W3	Console (lift lid)	Wood	Wood	Light Walnut	5L29 9L20 or 8L1T20	Phono Only	10W	4-3 1/2 2-5 2-12	.46 1.47 6.8
ML2607R3	Console (lift lid)	Wood	Wood	Mahogany	5L29 9L20 or 8L1T20	Phono Only	10W	4-3 1/2 2-5 2-12	.46 1.47 6.8
ML2607H3	Console (lift lid)	Wood	Wood	Cherry	5L29 9L20 or 8L1T20	Phono Only	10W	4-3 1/2 2-5 2-12	.46 1.47 6.8
ML2608W3	Console (lift lid)	Wood	Wood	Walnut	10LT20 MLT15 9L20 or 8L1T20	Phono-AM-FM	12W	4-3 1/2 2-5 2-12	.46 1.47 6.8

# FEATURES OF HIGH FIDELITY & STEREO FM MODELS

RECORD CHANGER				CONTROL PANEL	INDI- CATOR LIGHT	TYPE OF IDENTIFICATION AND SPECIAL FEATURES	RECORD STORAGE	RADIAL SOUND SPEAKER
TYPE	MOUNTING	CARTRIDGE	STYLUS					
169-209	Shelf	142-127 or 142-137	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio	None	♦
169-209	Shelf	142-127 or 142-137	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio	None	♦
169-209	Shelf	142-127 or 142-137	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio	None	♦
169-209	Shelf	142-127 or 142-137	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio	None	♦
169-208	Shelf	142-141	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest	Yes	♦
169-208	Shelf	142-141	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest	Yes	♦
169-208	Shelf	142-141	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest	Yes	♦
169-208	Shelf	142-141	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest	None	♦
169-208	Shelf	142-141	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest	None	♦
169-208	Shelf	142-141	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio	None	♦
169-208	Shelf	142-141	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio	None	♦
169-208	Shelf	142-141	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio	None	♦
169-208	Shelf	142-141	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio	None	♦
169-208	Shelf	142-141	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio	None	♦
169-208	Shelf	142-141	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio	Yes	♦
169-208	Shelf	142-141	Diamond Sapphire	Plastic Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio	None	♦
169-208	Shelf	142-141	Diamond Sapphire	Die-Cast Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest	Yes	KR102
169-208	Shelf	142-141	Diamond Sapphire	Die-Cast Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest	Yes	KR102
169-208	Shelf	142-141	Diamond Sapphire	Die-Cast Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest	None	KR102
169-208	Shelf	142-141	Diamond Sapphire	Die-Cast Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest	None	
169-208	Shelf	142-141	Diamond Sapphire	Die-Cast Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest	None	
169-208	Shelf	142-141	Diamond Sapphire	Die-Cast Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio	Yes	KR102

# FEATURES OF HIGH FIDELITY & STEREO FM MODELS

MODEL NO.	CABINET				CHASSIS			SPEAKER	
	STYLE	MATERIAL	FINISH	COLOR	MODEL	TYPE	EIA POWER OUTPUT	SIZE (IN.)	MAGNET (WT. OZ.)
ML2610M3	Console (lift lid)	Wood	Wood	Maple	10LT20 MLT15 9L20 or 8L1T20	Phono-AM-FM	12W	4-3 1/2 2-5 2-12	.46 1.47 6.8
ML2636R3	Console (lift lid) (casters)	Wood	Wood	Mahogany	10LT20 MLT15 9L20 or 8L1T20	Phono-AM-FM	12W	4-3 1/2 2-5 2-12	.46 1.47 6.8
ML2636M3	Console (lift lid) (casters)	Wood	Wood	Maple	10LT20 MLT15 9L20 or 8L1T20	Phono-AM-FM	12W	4-3 1/2 2-5 2-12	.46 1.47 6.8
ML2636H3	Console (lift lid) (casters)	Wood	Wood	Cherry	10LT20 MLT15 9L20 or 8L1T20	Phono-AM-FM	12W	4-3 1/2 2-5 2-12	.46 1.47 6.8
ML2670W3	Console (lift lid) (pivotal louver doors)	Wood	Wood	Walnut	11L8T25Z 8LT25Z	Phono-AM-FM	120W	4-3 1/2 2-Horn 2-12	.46 4.28 13.0
ML2675R3	Console (lift lid)	Wood	Wood	Mahogany	11L8T25Z 8LT25Z	Phono-AM-FM	120W	4-3 1/2 2-Horn 2-12	.46 4.28 13.0
ML2685H3	Console (lift lid)	Wood	Wood	Cherry	11L8T25Z 8LT25Z	Phono-AM-FM	120W	4-3 1/2 2-Horn 2-12	.46 4.28 13.0
ML2685X3	Console (lift lid)	Wood	Wood	Antique White	11L8T25Z 8LT25Z	Phono-AM-FM	120W	4-3 1/2 2-Horn 2-12	.46 4.28 13.0
RL2784W3	Console (sliding panels)	Masonite	Grained	Walnut	16L24 7L22	TV - Phono AM - FM	8.5W	2-3 1/2 2-8	.46 3.16
RL2784R3	Console (sliding panels)	Masonite	Grained	Mahogany	16L24 7L22	TV - Phono AM - FM	8.5W	2-3 1/2 2-8	.46 3.16
ML2784W3	Console (sliding panels)	Masonite	Grained	Walnut	16L24 10L22	TV - Phono AM - FM	8.5W	2-3 1/2 2-8	.46 3.16
ML2784R3	Console (sliding panels)	Masonite	Grained	Mahogany	16L24 10L22	TV - Phono AM - FM	8.5W	2-3 1/2 2-8	.46 3.16
ML2785W3	Console (lift lids)	Wood	Wood	Walnut	16L24 10L23	TV - Phono AM-FM	8.5W	2-3 1/2 2-4 2-10	.46 .46 3.16
ML2785R3	Console (lift lids)	Wood	Wood	Mahogany	16L24 10L23	TV - Phono AM - FM	8.5W	2-3 1/2 2-4 2-10	.46 .46 3.16
ML2785M3	Console (lift lids)	Wood	Wood	Maple	16L24 10L23	TV - Phono AM - FM	8.5W	2-3 1/2 2-4 2-10	.46 .46 3.16
ML2786W3	Console (lift lids)	Wood	Wood	Walnut	16L24 10L23	TV - Phono AM - FM	8.5W	2-3 1/2 2-10 2-4	.46 3.16 .68
7000W3	Console (lift lids)	Wood	Wood	Walnut	25LC30 4L22 MLT15 9L20 or 8L1T20	Color TV Phono AM - FM	8.5W	2-3 1/2 2-10	.85 6.8
7200W3	Console (lift lids) (sliding doors)	Wood	Wood	Walnut	25LC30 10LT20 MLT15 9L20 or 8L1T20	Color TV Phono AM - FM	12W	2-3 1/2 2-10 2-5 1/4	.85 6.8 1.0

# FEATURES OF HIGH FIDELITY & STEREO FM MODELS

RECORD CHANGER				CONTROL PANEL	INDICATOR LIGHT	TYPE OF IDENTIFICATION AND SPECIAL FEATURES	RECORD STORAGE	RADIAL SOUND SPEAKER
TYPE	MOUNTING	CARTRIDGE	STYLUS					
169-208	Shelf	142-141	Diamond Sapphire	Die-Cast Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest Stereo FM Radio	Yes	KR102
169-212	Shelf	142-141	Diamond Sapphire	Die-Cast Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio	None	KR102
169-212	Shelf	142-141	Diamond Sapphire	Die-Cast Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio	None	KR102
169-212	Shelf	142-141	Diamond Sapphire	Die-Cast Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio	None	KR102
169-211	Shelf	142-141	Diamond Sapphire	Die-Cast Escutcheon	Yes	ZENITH Extended Stereophonic High Fidelity Crest - Stereo - FM Radio	Yes	KR105
169-211	Shelf	142-141	Diamond Sapphire	Die-Cast Escutcheon	Yes	ZENITH Extended Stereophonic High Fidelity Crest - Stereo - FM Radio	Yes	KR105
169-211	Shelf	142-141	Diamond Sapphire	Die-Cast Escutcheon	Yes	ZENITH Extended Stereophonic High Fidelity Crest - Stereo - FM Radio	Yes	KR105
169-211	Shelf	142-141	Diamond Sapphire	Die-Cast Escutcheon	Yes	ZENITH Extended Stereophonic High Fidelity Crest - Stereo - FM Radio	Yes	KR105
169-207	Shelf	142-140	Sapphire Sapphire	Leatherette on Cabinet	No	ZENITH Stereophonic High Fidelity - Crest	None	♦
169-207	Shelf	142-140	Sapphire Sapphire	Leatherette on Cabinet	No	ZENITH Stereophonic High Fidelity - Crest	None	♦
169-207	Shelf	142-140	Sapphire Sapphire	Leatherette on Cabinet	No	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio	None	♦
169-207	Shelf	142-140	Sapphire Sapphire	Leatherette on Cabinet	No	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio	None	♦
169-207	Shelf	142-140	Sapphire Sapphire	Die-Cast Escutcheon	Yes	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio	None	KR102
169-207	Shelf	142-140	Sapphire Sapphire	Die-Cast Escutcheon	Yes	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio	None	KR102
169-207	Shelf	142-140	Sapphire Sapphire	Die-Cast Escutcheon	Yes	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio	None	KR102
169-208	Shelf	142-141	Diamond Sapphire	Die-Cast Escutcheon	Yes	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio	None	KR102
169-208	Shelf	142-141	Diamond Sapphire	Die-Cast Escutcheon	No	ZENITH Stereophonic High Fidelity - Crest Stereo - FM Radio Color Emblem - Crest	None	KR102
169-211	Shelf	142-141	Diamond Sapphire	Die Cast Escutcheon	No	ZENITH Color TV Color Emblem - Crest Stereo - FM Radio Stereophonic High Fidelity	None	KR102

# FEATURES OF HIGH FIDELITY & STEREO FM MODELS

MODEL NO.	CABINET				CHASSIS			SPEAKER	
	STYLE	MATERIAL	FINISH	COLOR	MODEL	TYPE	EIA POWER OUTPUT	SIZE (IN.)	MAGNET (WT. OZ.)
7500W3	Console (lift lids) (folding doors)	Wood	Wood	Walnut	25LC30 11L8T25Z 8LT25Z	Color TV Phono AM - FM	120W	4-3 1/2 2-Horn 2-12	.46 4.28 13.0
KR102W	Table	Wood	Wood	Walnut	---	---	---	3 1/2 6 x 9	.46 3.16
KR105W	Table	Wood	Wood	Walnut	---	---	---	Horn 6 x 9	4.28 3.16

♦ DENOTES MODELS WHICH HAVE PROVISIONS FOR FIELD INSTALLATION OF RADIAL SPEAKER ADAPTER KIT THAT WILL PERMIT USE OF KR102 RADIAL SOUND SPEAKERS.

# FEATURES OF HIGH FIDELITY & STEREO FM MODELS

RECORD CHANGER				CONTROL PANEL	INDI- CATOR LIGHT	TYPE OF IDENTIFICATION AND SPECIAL FEATURES	RECORD STORAGE	RADIAL SOUND SPEAKER
TYPE	MOUNTING	CARTRIDGE	STYLUS					
169-211	Shelf	142-141	Diamond Sapphire	Die-Cut Escutcheon	Yes	ZENITH Color TV Color Emblem - Crest Extended Stereophonic High Fidelity SPACE COMMAND "400" Stereo - FM Radio	None	KR105
---	---	---	---	---	No	ZENITH Radial Sound	---	---
---	---	---	---	---	No	ZENITH Radial Sound	---	---

# GENERAL

## MUTING CONTROL

The 25K muting control which supplies a back bias voltage to the cathode of the 19KC pilot amplifier is factory adjusted, and should not require readjustment. However, if the receiver is operated in an extremely noisy area, there is a possibility that there may be noise bursts of sufficient magnitude to overcome this mute voltage . . . when this occurs, the Stereophonic FM Indicator will light up. To further cut off the 19 KC pilot amplifier, carefully rotate the 25KC muting control in a counter-clockwise direction. This should only be done when a stereo signal is on the air since the mute control must only be advanced to a point where the Stereo Indicator does not light up on noise, but it should not be advanced to a point where the desired stereo signal is cut off.

More precise adjustment of the mute control can be made by using the SPTE-1 multiplex generator. This procedure is described in the multiplex alignment procedure included in this manual.

## MULTIPLEX ALIGNMENT

These receivers have been properly aligned at the factory and will not require further adjustment. As a result, it is not recommended that any attempt be made to alter the multiplex stages. However, should any major components in these circuits require replacement or should anyone tamper with the multiplex adjustments then, of course, realignment will be necessary.

Zenith has designed and manufactured an SPTE-1 Multiplex Generator that can be used to properly align the multiplex portion of these receivers. The multiplex alignment procedure is included in later pages of this manual. The SPTE-1 Multiplex Generator is available at your Zenith Distributor.

## ANTENNAS FOR STEREO FM

Due to the characteristics of the stereo FM system, it will require more signal for proper performance than does monaural FM. As a result, it may be necessary to operate the stereo FM receiver with an external antenna. The necessity for an external antenna will be determined by the signal conditions at each individual installation.

## EXTERNAL FM ANTENNA

If the receiver is operated in an area of either low signal strength, high noise, or where multipath (FM ghosts) signals are present, a good external FM antenna will be required. The necessity of an external antenna as a result of weak signal or noise, will be quite evident since the set will not limit, and/or noise will be quite evident. It is extremely difficult to determine if multipath (FM ghosts) signals are present, however, should the program material be distorted, the best manner to decide if multipath signals are the cause of the problem, is to connect an external FM antenna to the receiver. Usually a TV antenna may be available for trial, but even then the results can be misleading, since many TV antennas are of low gain on FM frequencies.

## FM CABINET ANTENNA

All models except the LPM95 contain an FM antenna built into the cabinet. This antenna consists of a

length of wire cut to the desired frequency, and attached to the internal periphery of the cabinet. The LPM95 uses a built-in line antenna.

## SIGNAL STRENGTH CHART

There are certain minimum voltages necessary for proper stereo FM reception. To help determine if there is sufficient signal available, the following developed AGC voltage versus microvolt input voltage charts have been compiled. Since the desired FM Station may not always be operating in the stereo mode when an installation is made, these AGC voltage measurements have been taken with a monaural FM signal. The point "\*" of minimum AGC voltage necessary for good stereo FM reception has been indicated on these charts. For chassis 8L1T20, 9L20, 10L22, 10L23 and 11L8T25Z connect a V.T.V.M. to the rear terminal of the FM antenna coil. This is the AGC line connected to Pin #2 of the 6JK8 RF amplifier.

For chassis 7L01 and 10L02 connect a V.T.V.M. to the feed-thru condenser on the top of the chassis, 3/8 of an inch to the right of the FM antenna coil. A green wire is connected to this feed-thru condenser.

### Chassis 8L1T20, 9L20, 10L22 and 10L23

Micro-volts Input	AGC Voltage at RF Coil
0	.8
25	.95
50	1.27
100	1.6
200	1.95
500	2.35
1 K	*2.7
5 K	3.6
10 K	4.0
20 K	4.5
50 K	5.1
100 K	5.6

### Chassis 7L01

Micro-volts Input	AGC Voltage at RG Grid
0	0.35 V
20	1.50
50	1.99
100	2.32
200	2.62
500	3.00
1 K	*3.30
5 K	5.40
10 K	7.20
20 K	9.0
50 K	12.0
100 K	14.0

### Chassis 10L02

Micro-volts Input	AGC Voltage at RF Coil
0	.46
20	.85
50	1.34
100	1.71
200	2.0
500	2.43

### Chassis 10L02 (cont'd.)

Micro-volts Input	AGC Voltage at RF Coil
1 K	*2.73
5 K	3.45
10 K	3.9
20 K	4.4
50 K	5.2
100 K	6.1

### Chassis 11L8T25Z

Micro-volts Input	AGC Voltage at RF Coil
0	.75
10	.82
20	.9
50	1.32
100	1.72
200	2.1
500	2.6
1 K	*2.95
2 K	3.3
5 K	3.85
10 K	4.3
20 K	4.8
50 K	5.3
100 K	6.0

### AUTOMATIC FREQUENCY CONTROL AFC

These receivers feature an automatic frequency control which automatically keeps your receiver on the exact station frequency when you are tuned to an FM station. To utilize this feature tune the receiver as instructed and then turn the band switch to AFC position.

When the desired FM station is a weak station, adjacent in frequency to a strong station, the AFC may pull the tuning into the stronger station. Under these conditions, place the bandswitch in FM position and tune the receiver as instructed.

Tuning the receivers on the frequency modulation band will require more care than on the broadcast band. A hissing sound may be noted when tuning between Frequency Modulation stations. This is normal, and will disappear as the station is tuned in. After a station is located, the pointer should be moved back and forth over it until the point of quietest reception and best tone quality is found. Correct tuning is indicated by the disappearance of background noise.

### SPEAKER PHASING

It is most important that coded speaker leads be connected to coded terminals on speakers for proper polarity within each speaker group. It is also then most important that the speaker groups be in phase with each other. One excellent method is to play a monaural record as described under Automatic Balance Control.

Under these conditions the sound should appear to come from a point midway between the two speaker groups. If the sound comes from any other point than midpoint, then one speaker group is out of phase with the other and you should check polarity. One of the easiest methods of checking polarity within the speaker group is to momentarily place a 4½ volt

battery across the speaker feed terminals. All the speaker cones should simultaneously move in the same direction.

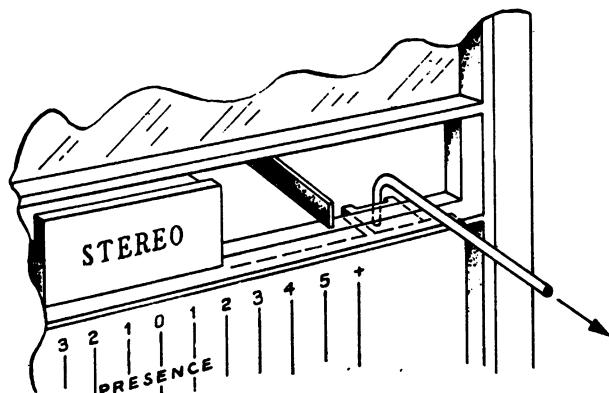
### 8LT25Z POWER AMPLIFIER

Power transistors and their circuits are unique in operation, therefore, repair procedure differs from those steps followed when repairing tube type circuits.

1. Each channel of the 8LT25Z amplifier uses a pair of matched power transistors in the final output stage. Therefore, should one transistor fail, both transistors must be replaced simultaneously, since they will not perform properly unless matched.
2. When a power transistor is replaced the insulator between the transistor and the heat sink should also be replaced.
3. Do not operate either amplifier without its proper speaker load (approximately 6.4 ohms).
4. Do not short out the audio output of either channel when the amplifier is operating.
5. Should a power transistor fail (short) be certain to replace the .39 ohm emitter resistors for the specific channel. Also be certain to check the condition of the silicon diode rectifiers.
6. Remove transistors from their sockets before doing any soldering to the socket lugs.

### 11L8T25Z TONE LIGHT REPLACEMENT

To replace the tone lights pull off the PUSH ON - PUSH OFF, FM-AFC, TAPE, and EXT STEREO Selector Switch knobs. Then take a stiff piece of wire shaped as in the illustration and pull out the tonal dial scale as indicated. This should be repeated at the four spots where the Selector Switch knobs have been removed. Pull off the plastic color shields to remove and replace the tone lights.



### FM, RF, AND IF ALIGNMENT

#### CHASSIS 8L1T20, 9L20, 10L22, 10L23 AND 11L8T25Z

Alignment of these chassis will, in most cases, not be necessary unless an RF or IF transformer is replaced or if someone has tampered with the adjustments.

Because of the wide band pass required in the multiplex FM tuner, it is desirable to use an FM signal generator having a deviation of 400 KC with a sweep rate of 60 cycles as well as an oscilloscope when

aligning both the IF and RF FM portions of this receiver. It is not only necessary to obtain maximum amplitude in the IF amplifier stages, but also necessary to maintain symmetry. To help achieve this symmetry, it is desirable to have 10.6, 10.7, and 10.8 megacycle markers in obtaining IF curve symmetry. The scope pattern example illustrating marker use to obtain this symmetry, is in illustration B.

The condenser mentioned further on in the alignment procedure should be as small as possible and the ground lead of the generator must be connected to the chassis at the base of the tube socket, where the signal is being injected. Should the signal be injected at some point other than a tube socket, then the ground lead should be connected to ground as closely as possible to this point.

In all alignment procedures, the signal generator output should be kept just high enough to obtain an indication. This is most necessary, since on some chassis we have a zero time constant limiter which will clip the signals if their magnitude is too great, resulting in erroneous waveforms.

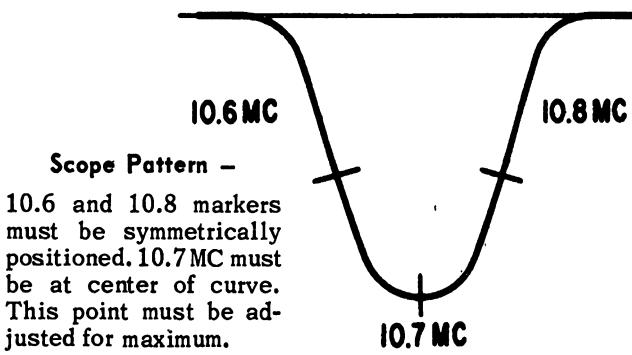
- A. Connect scope or V.T.V.M. to Pin #1 of the 6AU6 or 12AU6 limiter. The common scope or V.T.V.M. terminal should be connected to chassis.
- B. On Chassis 8L1T20, 9L20, 10L22, 10L23 and 11L8T25Z connect scope or V.T.V.M. to junction of 100 ohm and 330 mmf capacitor. This 100 ohm resistor is connected to terminal #6 of the ratio detector transformer.

#### AM ALIGNMENT

- C. An AC output meter connected across the primary or secondary of the output transformer will be satisfactory for all AM, IF, and RF adjustments.

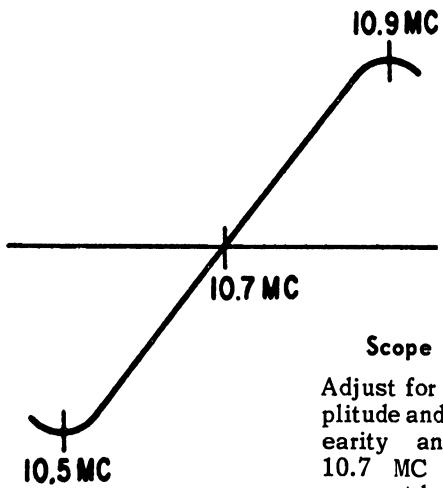
#### CHANGER, CARTRIDGE AND STYLUS INFORMATION

CHANGER	CARTRIDGE	STYLUS	DESCRIPTION
	142-95	1.0 56-371 3.0 56-372	Sapphire-Sapphire
169-191	142-125	1.0 56-371 3.0 56-372	Sapphire-Sapphire
169-192	142-124	1.0 56-371 3.0 56-372	Sapphire-Sapphire
169-205	142-126 or 142-136	S55804 - S62648	Sapphire-Sapphire
169-207	142-140	S62648	Sapphire-Sapphire
169-208	142-141	S62649	Diamond-Sapphire
169-209	142-127 or 142-137	S55805 - S62649	Diamond-Sapphire
169-211	142-141	S62649	Diamond-Sapphire
169-212	142-141	S62649	Diamond-Sapphire
169-213	142-133 or 142-144	.7 3.0 56-495 .7 3.0 56-518	Sapphire-Sapphire
169-216	142-140	S62648	Sapphire-Sapphire
169-218	142-133 or 142-144	.7 3.0 56-495 .7 3.0 56-518	Sapphire-Sapphire
169-219	142-141	S62649	Sapphire-Sapphire
169-220	142-141	S62649	Diamond-Sapphire
169-221	142-141	S62649	Diamond-Sapphire



#### Scope Pattern -

10.6 and 10.8 markers must be symmetrically positioned. 10.7 MC must be at center of curve. This point must be adjusted for maximum.



#### Scope Pattern -

Adjust for maximum amplitude and maintain linearity and symmetry. 10.7 MC must be on curve at base line.

## NEUTRALIZING 6JK8 R.F. AMPLIFIER

### Equipment - Bias Supply (Variable 0 to 20 Volts)

1. Tune receiver to 108 mc.
2. Insert a 108 mc R.F. signal at FM-G antenna terminals.
3. Connect V.T.V.M. or scope to Pin #1 grid of the 6AU6 limiter. The common scope or V.T.V.M. terminal should be connected to chassis.
4. Remove the AGC line from the tuner feed through and connect the ( - ) negative lead of the bias supply to this point. Connect the ( + ) terminal to chassis.
5. Adjust the bias supply to approximately -10 volts.
6. Carefully vary the position of the two wires adjacent to the body of C5 until minimum output is obtained, from the limiter grid test point.

## RF AND IF ALIGNMENT

### CHASSIS 6L01, 7L01, 7L22 AND 10L02

Alignment of these chassis will, in most cases, be unnecessary unless an IF or RF transformer is replaced or the adjustments have been tampered with.

FM Discriminator Alignment: When the secondary of the discriminator is aligned (operation 5) use suffi-

cient signal input to get a good positive and negative indication before setting the slug for zero reading. A center zero indicating meter is recommended for this adjustment, but is not absolutely necessary. Reversing the leads of a non-zero center meter, or observing closely when the meter starts to go to the left (negative) of zero will give the same results.

FM IF Alignment: Because of the wide band pass, it is desirable to use an FM signal generator and a cathode ray oscilloscope when aligning the FM IF channel. The instruction book for the Zenith Model 800 Signal Generator (Form Z8001) covers complete FM alignment procedure. If visual alignment equipment is unavailable, reasonably accurate alignment can be made by following the procedure outlined in this service note.

Correct alignment can only be made if the following procedure is followed:

A vacuum tube voltmeter with an isolation resistor of 2,000,000 ohms in series with the hot lead will serve for FM adjustments. This lead should be shielded.

The signal generator output should be kept just high enough to get an indication on the meter.

OPERATION	CONNECT OSCILLATOR TO	DUMMY ANTENNA	INPUT SIGNAL FREQUENCY	BAND	SET DIAL TO	ADJUST	PURPOSE
1(d)	Pin 7 12BE6 Converter	.05 Mfd.	455 Kc. 400 Cycle Modulated	BC	600 Kc.	L16, 17, 14, 15	Align IF channel for maximum output
2(d)	2 turns loosely coupled to wavemagnet		1600 Kc. 400 Cycle Modulated	BC	1600 Kc.	C19D	Set oscillator to dial scale
3(d)	2 turns loosely coupled to wavemagnet		1400 Kc. 400 Cycle Modulated	BC	1400 Kc.	C19B	Align antenna stage
4(a)	Pin 1 (grid) on 12AU6 limiter	.05 Mfd.	10.7 Mc. Unmodulated	FM		L10 coil slug pri.-discr.	Align primary of discriminator for maximum reading
5(f)	Pin 1 (grid) on 12AU6 limiter	.05 Mfd.	10.7 Mc. Unmodulated	FM		L11 coil slug sec. of discr.	Adjust secondary of discriminator for zero reading
6(c)	Pin 1 (grid) on 12BA6 2nd I.F.	.05 Mfd.	10.7 Mc. Unmodulated	FM		L8 & L9 pri. & sec. of 3rd If transf.	Align 3rd IF transf. for max. reading
7(c)	Pin 1 (grid) on 12BA6 1st IF	.05 Mfd.	10.7 Mc. Unmodulated	FM		L6 & L7 2nd IF transf.	Align 2nd IF transf. for max. reading
8(c)	Pin 2 (grid) on 12DT8 converter tube socket	.05 Mfd.	10.7 Mc. Unmodulated	FM		L4 & 5 pri. & sec. of 1st IF transf.	Align 1st IF transf. for max. reading
9(c)	Antenna Post FM	270 Ohms	98 Mc. Unmodulated	FM	98 Mc.	L3 osc. coil slug	Set osc. to dial scale
10(c)	(Remove line ant.)	270 Ohms	98 Mc. Unmodulated	FM	98 Mc.	L2 det. coil slug	Align det. stage to max. reading

## RF AND IF ALIGNMENT PROCEDURE FOR CHASSIS 6L01

- Vacuum Tube Voltmeter Lug 1 on discriminator transformer to chassis (half discriminator load).
- Vacuum Tube Voltmeter from Limiter Grid to Chassis.

- Vacuum Tube Voltmeter Lug 2 of T6 to Chassis.
- Vacuum Tube Voltmeter Pin #1 of 12AL5 Disc. Tube to Chassis (full discriminator load)

OPERATION	CONNECT OSCILLATOR TO	DUMMY ANTENNA	INPUT SIGNAL FREQUENCY	BAND	SET DIAL TO	ADJUST	PURPOSE
1(d)	Pin 7 12BE6 Converter	.05 Mfd.	455 Kc. 400 Cycle Modulated	BC	600 Kc.	L8, 9, 16, 17	Align IF channel for maximum output
2(d)	2 turns loosely coupled to wavemagnet		1600 Kc. 400 Cycle Modulated	BC	1600 Kc.	C32D	Set oscillator to dial scale
3(d)	2 turns loosely coupled to wavemagnet		1400 Kc. 400 Cycle Modulated	BC	1400 Kc.	C32B	Align antenna stage
4(a)	Pin 1 (grid) on 12AU6 limiter	.05 Mfd.	10.7 Mc. Unmodulated	FM		L12 coil slug pri-dscr.	Align primary of discriminator for maximum reading
5(f)	Pin 1 (grid) on 12AU6 limiter	.05 Mfd.	10.7 Mc. Unmodulated	FM		L13 coil slug sec. of discr.	Adjust secondary of discriminator for zero reading
6(c)	Pin 1 (grid) on 12BA6 2nd I.F.	.05 Mfd.	10.7 Mc. Unmodulated	FM		L10 & L11 pri. & sec. of 3rd If trans.	Align 3rd IF transf. for max. reading
7(c)	Pin 1 (grid) on 12BA6 1st IF	.05 Mfd.	10.7 Mc. Unmodulated	FM		L6 & L7 2nd IF transf.	Align 2nd IF transf. for max. reading
8(c)	Pin 2 (grid on 12DT8 converter tube socket	.05 Mfd.	10.7 Mc. Unmodulated	FM		L4 & 5 pri. & sec. of 1st IF transf.	Align 1st IF transf. for max. reading
9(c)	Antenna Post FM	270 Ohms	98 Mc. Unmodulated	FM	98 Mc.	L3 osc. coil slug	Set osc. to dial scale
10(c)	(Remove line ant.)	270 Ohms	98 Mc. Unmodulated	FM	98 Mc.	L2 det. coil slug	Align det. stage to max. reading

#### RF and IF Alignment Procedure for Chassis 7L01

- (a) Vacuum Tube Voltmeter Lug 1 on discriminator transformer to chassis (half discriminator load).
- (c) Vacuum Tube Voltmeter from Limiter Grid to Chassis.
- (d) Vacuum Tube Voltmeter Lug 2 of T3 to Chassis.
- (f) Vacuum Tube Voltmeter Pin #1 of 19GQ7 Disc. Tube to Chassis (full discriminator load)

OPERATION	CONNECT OSCILLATOR TO	DUMMY ANTENNA	INPUT SIGNAL FREQUENCY	BAND	SET DIAL TO	ADJUST	PURPOSE
1(d)	Pin 7 12BE6 Converter	.05 Mfd.	455 Kc. 400 Cycle Modulated	BC	600 Kc.	L18, 19, 16, 17, 13, 14	Align IF channel for maximum output
2(d)	2 turns loosely coupled to wavemagnet		1600 Kc. 400 Cycle Modulated	BC	1600 Kc.	C28D	Set oscillator to dial scale
3(d)	2 turns loosely coupled to wavemagnet		1400 Kc. 400 Cycle Modulated	BC	1400 Kc.	C28B	Align antenna stage
4(a)	Pin 1 (grid) on 12AU6 limiter	.05 Mfd.	10.7 Mc. Unmodulated	FM		L10 coil slug pri- discr.	Align primary of dis- criminator for maxi- mum reading
5(f)	Pin 1 (grid) on 12AU6 limiter	.05 Mfd.	10.7 Mc. Unmodulated	FM		L11 coil slug sec. of discr.	Adjust secondary of dis- criminator for zero reading
6(c)	Pin 1 (grid) on 12BA6 2nd I.F.	.05 Mfd.	10.7 Mc. Unmodulated	FM		L8 & L9 pri. & sec. of 3rd If transf.	Align 3rd IF transf. for max. reading
7(c)	Pin 1 (grid) on 12BA6 1st IF	.05 Mfd.	10.7 Mc. Unmodulated	FM		L6 & L7 2nd IF transf.	Align 2nd IF transf. for max. reading
8(c)	Pin 7 (grid) on 12DT8 converter tube socket	.05 Mfd.	10.7 Mc. Unmodulated	FM		L4 & 5 pri. & sec. of 1st IF transf.	Align 1st IF transf. for max. reading
9(c)	Antenna Post FM	270 Ohms	98 Mc. Unmodulated	FM	98 Mc.	L3 osc. coil slug	Set osc. to dial scale
10(c)	(Remove line ant.)	270 Ohms	98 Mc. Unmodulated	FM	98 Mc.	L2 det. coil slug	Align det. stage to max. reading

#### RF and IF Alignment Procedure for Chassis 7L22

- (a) Vacuum Tube Voltmeter Lug 1 on discriminator transformer to chassis (half discriminator load).
- (c) Vacuum Tube Voltmeter from Limiter Grid to Chassis.
- (d) Vacuum Tube Voltmeter Lug 2 of T7 to Chassis.
- (f) Vacuum Tube Voltmeter Pin #1 of 19GQ7 Disc. Tube to Chassis (full discriminator load)

OPERATION	CONNECT GENERATOR TO	DUMMY ANTENNA	INPUT SIGNAL FREQUENCY	SET DIAL TO	ADJUST IRON CORES	PURPOSE
1 B	Pin #1 12AU6 Limiter Grid	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	L15	Adjust primary and secondary of ratio detector for maximum amplitude and symmetry as shown in Scope Pattern "B",
2 B	Pin #1 12AU6 Limiter Grid	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	L17	
3 A	Pin #1 12BA6 2nd I.F. Grid	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	L11, L12	Align I.F. transformers for maximum output and symmetry; this pattern is not necessarily identical to the over all Scope Pattern "A",
4 A	Pin #1 12BA6 1st I.F. Grid	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	L7, L8	
5 A	Junction C9, and L2 FM Detector	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	L4, L5	Align I.F. transformers for maximum out & symmetry as indicated in Scope Pattern "A",
6 A	Coil Test Point "F"	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	Readjust L4, L5, L7, L8 L11, L12	
7 A	FM Antenna post (remove antenna)	300 ohms	98 Mc. 400 Kc. Deviation	98 Mc.	L3	Set Oscillator to dial scale
8 A	FM Antenna post (remove antenna)	300 ohms	98 Mc. 400 Kc. Deviation	98 Mc.	L2 & L1	Align detector and antenna stages for maximum
9 C	Pin #1 12BE6 Converter Grid	.05	455 Kc. 400 Cycle Modulated	600 Kc.	L21, L22, L9, L10, L13, L14	Align AM, I.F. for maximum
10 C	Two turn loop loosely coupled to Wavemagnet		1600 Kc. 400 Cycle Modulated	1600 Kc.	C35F	Set oscillator to dial scale
11 C	Two turn loop loosely coupled to Wavemagnet		1400 Kc. 400 Cycle Modulated	1400 Kc.	C35D, C35B	Align detector and antenna stages.

For A, B, C See Page 16

OPERATION	CONNECT OSCILLATOR TO	DUMMY ANTENNA	INPUT SIGNAL FREQUENCY	BAND	SET DIAL TO	ADJUST	PURPOSE
1(d)	Pin 7 12BE6 Converter	.05 Mfd.	455 Kc. 400 Cycle Modulated	BC	600 Kc.	L22, 23, 6, 7	Align IF channel for maximum output
2(d)	2 turns loosely coupled to wavemagnet		1600 Kc. 400 Cycle Modulated	BC	1600 Kc.	C32D	Set oscillator to dial scale
3(d)	2 turns loosely coupled to wavemagnet		1400 Kc. 400 Cycle Modulated	BC	1400 Kc.	C32B	Align antenna stage
4(a)	Pin 1 (grid) on 12AU6 limiter	.05 Mfd.	10.7 Mc. Unmodulated	FM		L14 coil slug pri.-discr.	Align primary of discriminator for maximum reading
5(f)	Pin 1 (grid) on 12AU6 limiter	.05 Mfd.	10.7 Mc. Unmodulated	FM		L15 coil slug sec. of discr.	Adjust secondary of discriminator for zero reading
6(c)	Pin 1 (grid) on 12BA6 2nd I.F.	.05 Mfd.	10.7 Mc. Unmodulated	FM		L12 & L13 pri. & sec. of 3rd If transf.	Align 3rd IF transf. for max. reading
7(c)	Pin 1 (grid) on 12BA6 1st IF	.05 Mfd.	10.7 Mc. Unmodulated	FM		L10 & L11 2nd IF transf.	Align 2nd IF transf. for max. reading
8(c)	Pin 7 (grid) on 12DT8 converter tube socket	.05 Mfd.	10.7 Mc. Unmodulated	FM		L8 & 9 pri. & sec. of 1st IF transf.	Align 1st IF transf. for max. reading
9(c)	Antenna Post FM	270 Ohms	98 Mc. Unmodulated	FM	98 Mc.	L3 osc. coil slug	Set osc. to dial scale
10(c)	(Remove line ant.)	270 Ohms	98 Mc. Unmodulated	FM	98 Mc.	L2 det. coil slug	Align det. stage to max. reading

#### RF and IF Alignment Procedure for Chassis 10L02

- (a) Vacuum Tube Voltmeter Lug 1 on discriminator transformer to chassis (half discriminator load).
- (c) Vacuum Tube Voltmeter from Limiter Grid to Chassis.
- (d) Vacuum Tube Voltmeter Lug 2 of T10 to Chassis.
- (f) Vacuum Tube Voltmeter Pin #9 of 19GQ7 Disc. Tube to Chassis (full discriminator load)

OPERATION	CONNECT GENERATOR TO	DUMMY ANTENNA	INPUT SIGNAL FREQUENCY	SET DIAL TO	ADJUST IRON CORES	PURPOSE
1 B	Pin #1 12AU6 Limiter Grid	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	L15	Adjust primary and secondary of ratio detector for maximum amplitude and symmetry as shown in Scope Pattern "B",
2 B	Pin #1 12AU6 Limiter Grid	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	L17	
3 A	Pin #1 12BA6 2nd I.F. Grid	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	L11, L12	Align I.F. transformers for maximum output and symmetry; this pattern is not necessarily identical to the over all Scope Pattern "A",
4 A	Pin #1 12BA6 1st I.F. Grid	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	L7, L8	
5 A	Junction C9, and L2 FM Detector	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	L4, L5	Align I.F. transformers for maximum out & symmetry as indicated in Scope Pattern "A",
6 A	Coil Test Point "F",	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	Readjust L4, L5, L7, L8 L11, L12	
7 A	FM Antenna post (remove antenna)	300 ohms	98 Mc. 400 Kc. Deviation	98 Mc.	L3	Set Oscillator to dial scale
8 A	FM Antenna post (remove antenna)	300 ohms	98 Mc. 400 Kc. Deviation	98 Mc.	L2 & L1	Align detector and antenna stages for maximum
9 C	Pin #1 12BE6 Converter Grid	.05	455 Kc. 400 Cycle Modulated	600 Kc.	L21, L22, L9, L10, L13, L14	Align AM, I.F. for maximum
10 C	Two turn loop loosely coupled to Wavemagnet		1600 Kc. 400 Cycle Modulated	1600 Kc.	C47F	Set oscillator to dial scale
11 C	Two turn loop loosely coupled to Wavemagnet		1400 Kc. 400 Cycle Modulated	1400 Kc.	C47D, C47B	Align detector and antenna stages.

RF and IF Alignment Procedure for Chassis 10L22

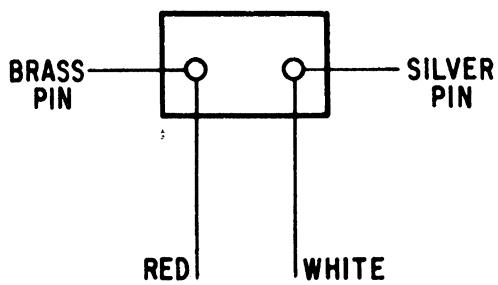
OPERATION	CONNECT GENERATOR TO	DUMMY ANTENNA	INPUT SIGNAL FREQUENCY	SET DIAL TO	ADJUST IRON CORES	PURPOSE
1 B	Pin #1 12AU6 Limiter Grid	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	L15	Adjust primary and secondary of ratio detector for maximum amplitude and symmetry as shown in Scope Pattern "B"
2 B	Pin #1 12AU6 Limiter Grid	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	L17	
3 A	Pin #1 12BA6 2nd I.F. Grid	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	L11, L12	Align I.F. transformers for maximum output and symmetry; this pattern is not necessarily identical to the over all Scope Pattern "A",
4 A	Pin #1 12BA6 1st I.F. Grid	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	L7, L8	
5 A	Junction C9, and L2 FM Detector	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	L4, L5	Align I.F. transformers for maximum out & symmetry as indicated in Scope Pattern "A",
6 A	Coil Test Point "F"	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	Readjust L4, L5, L7, L8 L11, L12	
7 A	FM Antenna post (remove antenna)	300 ohms	98 Mc. 400 Kc. Deviation	98 Mc.	L3	Set Oscillator to dial scale
8 A	FM Antenna post (remove antenna)	300 ohms	98 Mc. 400 Kc. Deviation	98 Mc.	L2 & L1	Align detector and antenna stages for maximum
9 C	Pin #1 12BE6 Converter Grid	.05	455 Kc. 400 Cycle Modulated	600 Kc.	L21, L22, L9, L10, L13, L14	Align AM, I.F. for maximum
10 C	Two turn loop loosely coupled to Wavemagnet		1600 Kc. 400 Cycle Modulated	1600 Kc.	C35F	Set oscillator to dial scale
11 C	Two turn loop loosely coupled to Wavemagnet		1400 Kc. 400 Cycle Modulated	1400 Kc.	C35D, C35B	Align detector and antenna stages.

RF and IF Alignment Procedure for Chassis 10L23

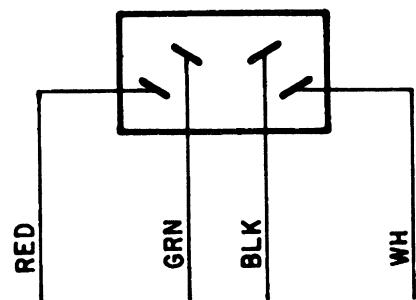
OPERATION	CONNECT GENERATOR TO	DUMMY ANTENNA	INPUT SIGNAL FREQUENCY	SET DIAL TO	ADJUST IRON CORES	PURPOSE
1 B	Pin #1 6AU6 2nd limiter grid	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	L11	Adjust primary and secondary of ratio detector for maximum amplitude & symmetry as shown in Scope Pattern "B",
2 B	Pin #1 6AU6 2nd limiter grid	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	L13	
3 A	Pin #2 6BN6 1st limiter grid	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	L10	Align I.F. transformers for maximum output & symmetry. This pattern is not necessarily identical to the overall Scope Pattern "A",
4 A	Pin #2 6EQ7 2nd I.F. grid	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	L8, L9	
5 A	Pin #1 6BA6 1st I.F. grid	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	L6, L7	
6 A	Junction C9, and L2 FM Detector Coil Test Point "F",	.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	L4, L5	Align I.F. transformers for maximum output & symmetry as indicated in Scope Pattern "A",
7 A		.001 mfd	10.7 Mc. 400 Kc. Deviation	88 Mc.	Readjust L4, L5, L6, L7, L8, L9, L10	
8 A	FM antenna post (remove antenna)	300 ohms	98 Mc. 400 Kc. Deviation	98 Mc.	L3	Set oscillator to dial scale
9 A	FM antenna post (remove antenna)	300 ohms	98 Mc. 400 Kc. Deviation	98 Mc.	L2 & L1	Align detector and antenna stages for maximum.
10 C	Pin #1 6BE6 converter grid	.05	455 Kc. 400 Cycle Modulated	600 Kc.	L21, L22, L14, L15, L16, L17	Align AM I.F. for maximum
11 C	Two turn loop loosely coupled to wavemagnet		1600 Kc. 400 Cycle Modulated	1600 Kc.	C37F	Set oscillator to dial scale
12 C	Two turn loop loosely coupled to wavemagnet		1400 Kc. 400 Cycle Modulated	1400 Kc.	C37D & 37B	Align detector and antenna stages

RF and IF Alignment Procedure for Chassis 11LT825Z

## TERMINAL END VIEW OF CARTRIDGE



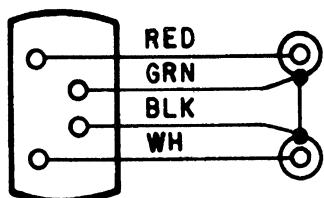
**TERMINAL VIEW  
OF CARTRIDGE**



## 142 - 95 - 125 CARTRIDGE CONNECTIONS

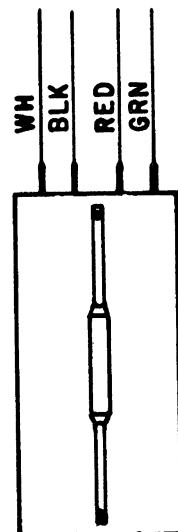
## 142 - 133 - 144 CARTRIDGE CONNECTIONS

## TERMINAL VIEW OF CARTRIDGE



## 142 - 124 CARTRIDGE CONNECTIONS

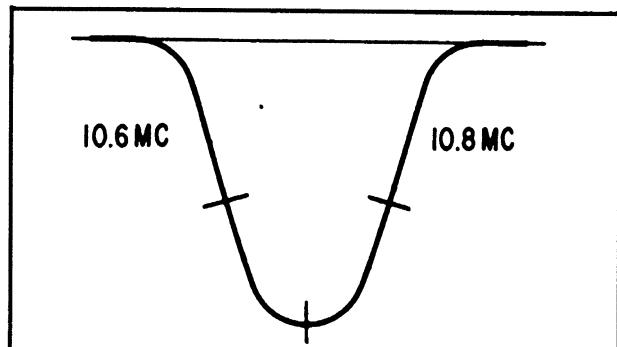
**142 – 126 – 127 – 136 – 137 – 140 – 141**  
**CARTRIDGE CONNECTIONS**



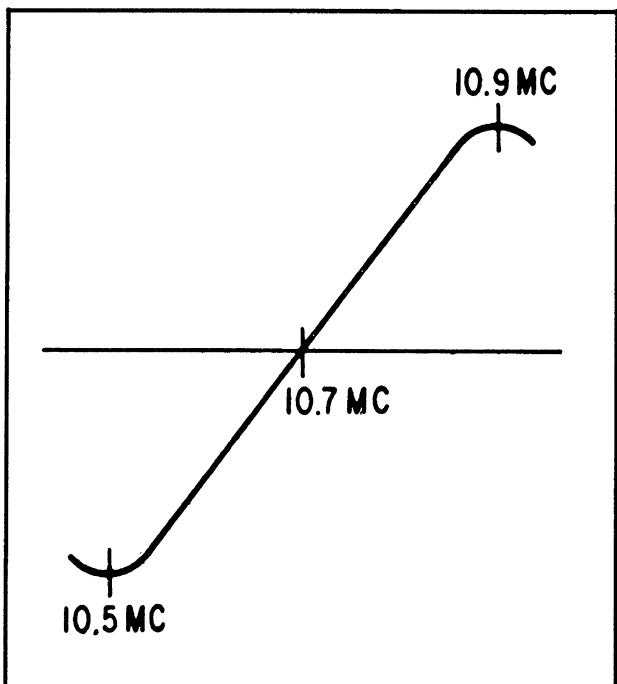
## **BOTTOM VIEW OF CARTRIDGE**

## MULTIPLEX ALIGNMENT PROCEDURE

Using the Zenith FM multiplex signal generator, the multiplex portion of Zenith or any FM multiplex receiver can be aligned, but first before any attempt is made to do this it is necessary that the technician be certain that the RF, IF, and ratio detector alignment is correct, and that the receiver operates normally on monaural signals.



IF CURVE



RATIO DETECTOR CURVE

Because of the wide band pass required in the multiplex FM receiver, it is desirable to use an FM signal generator having a deviation of at least 200 KC with a sweep rate of 60 cycles, as well as an oscilloscope. During the IF and ratio detector alignment it is not only necessary to obtain maximum gain, but also extremely important to maintain symmetry.

To help achieve this IF curve symmetry 10.6 and 10.8 megacycle markers must be symmetrically positioned and the 10.7 megacycle marker must be at the center of the curve. When aligning the ratio detector 10.5 and 10.9 megacycle markers are desirable to achieve S curve symmetry. The pattern illustrating marker use to obtain S curve symmetry indicates it is most necessary to adjust for maximum gain and at the same time

maintain linearity and symmetry. 10.7 megacycles must be on the curve at the reference line. 10.5 megacycles and 10.9 megacycles must be at the lower and upper turn of the S curve respectively. Only when the I.F. and ratio detector circuitry have been aligned in accordance with these specifications should the technician proceed to align the multiplex portion of the receiver.

### Preliminary Procedures

Before using the Zenith FM multiplex signal generator, it is recommended that it be connected to the power source and turned on giving it a 10 to 20 minute warmup period. This will allow ample time for the RF, audio, and 19KC oscillators to stabilize.

The following procedure is only necessary when the generator has been received from the factory, or has been subjected to a great deal of handling or transportation vibration. Although the 19KC pilot generator oscillator is extremely stable, there is always the possibility that it could shift from its precisely assigned frequency. As a result, we have a very simple method to check the 19KC pilot frequency using an FM multiplex receiver and an FM multiplex station as a frequency standard. Proceed as follows:

1. Tune your FM multiplex receiver to an FM multiplex station and when the pilot indicator lights up, this indicates the 19KC pilot amplifier is functioning and the doubler and ringing circuit will be creating a 38KC sine wave. Since this 38KC sine wave is developed from information obtained from the transmitter, it must be on frequency and can be used as a reference standard. With the enclosed cable, connect to the plate terminal of the 38KC subcarrier amplifier (380 volts PP) and connect the other end of this cable to the 38KC input terminal on the FM multiplex generator.
2. Set the pilot carrier amplitude control to 10%, plug in a pair of high impedance earphones into the Beat Frequency Output Jack on the generator, then adjust the pilot carrier frequency with an IF alignment wrench. Watch the 38KC neon zero beat indicator, and listen to the phones. When the zero beat is obtained between the two 38KC signals, the standard from the receiver and the 38KC from the multiplex generator, the 19KC oscillator in the generator will be on the exact frequency. After this zero beat adjustment has been made, disconnect all cables.

This generator provides composite multiplex output as well as an RF signal, FM modulated by the composite multiplex signal. The composite signal is very useful since it is an excellent tool that can be used in trouble-shooting and signal tracing the multiplex portion of a receiver. We do not recommend that multiplex alignment be made using only the composite signal injected at the output terminal of the ratio detector tertiary winding. Since there is always a possibility of some phase shift occurring in the RF, IF, or ratio detector circuits, multiplex alignment made by signal injection at the ratio detector would not be as correct for each receiver as it would be if the composite signal FM modulated an RF carrier and this signal were injected into the FM antenna terminals. With the signal injected in this manner, the multiplex alignment would be the best that could possibly be achieved, and separation would be the maximum obtainable for this specific receiver.

The RF carrier in this generator is variable from 88 to 108 MC. The RF signal should be injected at a point in the FM band where no other signal is present. If at all possible this should be at a frequency near the middle of the FM band. Tune the FM receiver to this point and adjust the RF frequency adjusting slug on the generator to this same frequency. The AGC voltage developed in the receiver should be approximately 5 to 6 volts. AGC voltage substantially less than this will indicate the RF frequency adjusting slug is tuned to an image.

#### 67 KC Trap Adjustment

1. Connect the stereo generator RF leads to the G and F FM antenna terminals and set the pilot carrier control to zero.
2. Move L + R and L - R switches to OFF position.
3. Move 67KC generator switch from OFF position up to 67KC.
4. Connect the V.T.V.M. (AC scale) and/or scope to either C.T. or either end of multiplex detector coil and chassis ground.
5. Adjust 67KC trap for minimum output.
6. Move 67KC generator switch to OFF position.

#### 19 KC Subcarrier amplifier adjustment

1. Turn generator pilot carrier amplitude control to 10% position.
2. Connect the V.T.V.M. (DC scale) and/or scope to the junction of the two frequency doubling diodes and chassis.
3. Adjust the mute control to maximum bias so that the 19KC pilot carrier amplifier is cut off. (It may be necessary to momentarily switch receiver to AM position to disrupt the 19KC signal so the stereo indicator will turn off.) After the pilot carrier is cut off, it will be necessary to rotate the receiver mute control towards minimum bias so there will be sufficient signal for alignment in Step #4. Then as the 19KC signal increases while making the adjustment in Step #4, the mute control must simultaneously be rotated towards maximum bias so the stereo indicator will not fire. (If it does fire, it may be necessary to momentarily switch receiver to AM to extinguish it).
4. Adjust the 19KC and frequency doubler coils for maximum DC output from the diodes.
5. Now slowly rotate the mute control towards minimum bias and stop when the 19KC stereo indicator fires (lights up).
6. Place the V.T.V.M. (AC scale) and/or scope at either end of the secondary of the multiplex detector coil and chassis.
7. Adjust the multiplex detector coil for maximum 38KC output.

#### Separation Adjustments

1. Move L - R generator switch from OFF position up to L - R position.
2. Connect a V.T.V.M. (AC scale) and/or scope to the L audio output after the 38KC filter and chassis.
3. Adjust doubler coil for maximum voltage at L output. This will be a very critical adjustment. There may be two peaks, in which case the one closest to the adjustment obtained in 19KC SUBCARRIER ADJUSTMENT, procedure #4, will be the correct one.

4. Now also turn on the L + R signal and check R output after the 38KC filter. The magnitude of this signal should be much less than the signal at the L output. The signal voltage at the L audio output should be approximately 10 times greater than the voltage at the R output.
5. On receivers having a separation control, adjust it for minimum signal at R output.

#### Mute Level Adjustment

1. Turn generator pilot carrier amplitude control to 5% and rotate the mute control to maximum bias position. Then momentarily switch to AM to disrupt the 19KC signal so the stereo indicator will turn off.
2. Now slowly rotate the mute control in the opposite direction and stop the instant the stereo indicator lights up.

#### TROUBLE-SHOOTING

Should a problem arise in aligning the FM multiplex portion of the receiver and the technician does not know whether the difficulty lies in the RF, IF, limiter and ratio detector portions of the receiver, or whether the difficulty lies in the multiplex portion, the multiplex generator can be used as an excellent signal tracing device to determine if the multiplex section of the receiver is functioning properly. The composite output of the multiplex generator can be injected at P, the output of the ratio detector. To reduce possible extraneous signals coming through the ratio detector, connect the screen and plate of the limiter together with a jumper lead. The wave forms and their magnitudes may vary slightly from chassis to chassis, however, they are quite indicative of what will be seen when signal tracing the multiplex circuitry.

#### 67 KC Signal Tracing

1. Set the 19KC pilot carrier control to zero.
2. Move L + R and L - R switches to OFF position.
3. Move the 67KC generator switch from OFF position up to 67KC. Sequentially connect an oscilloscope to points P, Q, T, and S. A 67KC sine wave should be seen at P. At Q a 67KC signal should be seen but it will be much smaller in magnitude than at P, indicating that the trap has attenuated the signal. The voltage relationship should be approximately 20 to 1. 67KC can also be observed at points T and S. If the relationship of all wave forms is correct, the 67KC circuitry has now been thoroughly checked and is functioning correctly.

#### 19 KC Signal Tracing

1. Move the 67KC generator switch to OFF position.
2. Turn the generator 19KC pilot carrier amplitude control to 10% position.

Sequentially connect your scope to points Q, L, M, and N. At all points you should see the 19KC sine wave. At the plate, point N, of the 19KC pilot amplifier the 19KC sine wave should be seen in much greater magnitude than at M.

### **Doubler and Subcarrier Signal Tracing**

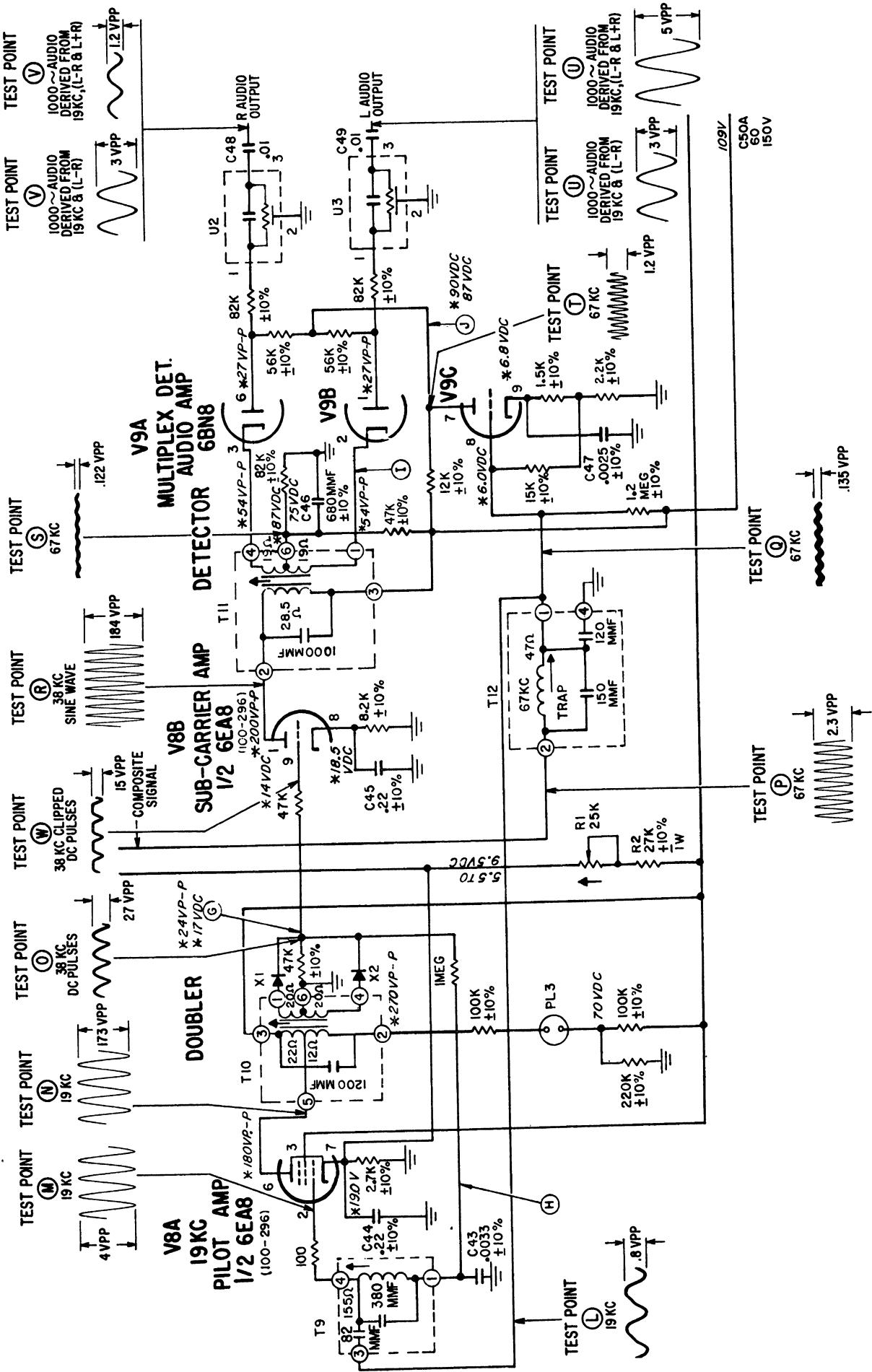
To determine if the doubler is functioning, place your scope at point O and you will see 38KC DC pulses. Placing the scope at W you will see 38KC clipped DC pulses. Placing the scope at the plate, R, of the subcarrier amplifier, you should see a 38KC sine wave which will indicate that the subcarrier amplifier and associated ringing circuitry is functioning properly.

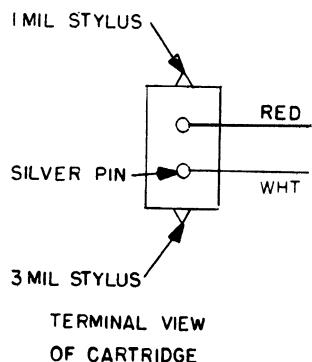
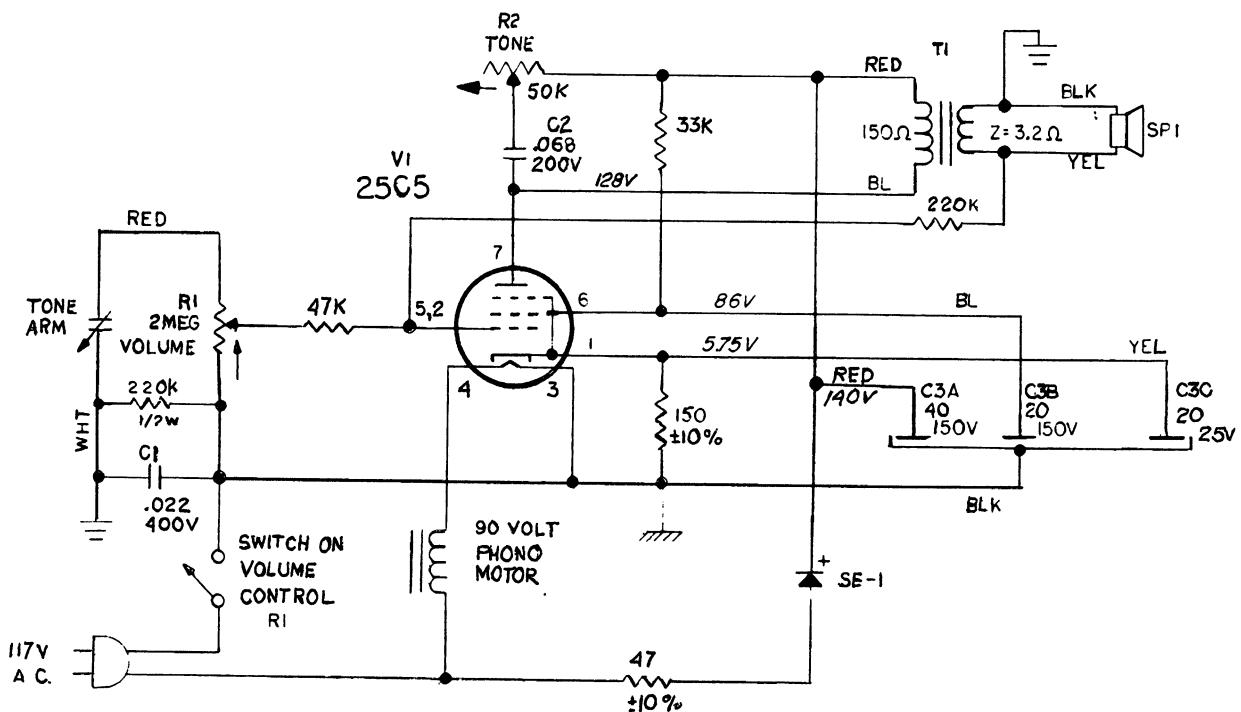
### **Multiplex Detector Signal Tracing**

1. Leave the 19KC amplitude control at 10%.
2. Move the L-R generator switch from OFF position to L-R position. You should see equal amplitude 1000 cycle sine waves at both points V and U.

3. Move the L+R switch from OFF up to L+R and look at the L audio output, point U, and measure the magnitude of the 1000 cycle sine wave. At point V you will also see a 1000 cycle sine wave and if the multiplex detector and preceding circuitry are aligned properly, the magnitude of the wave form at U should be greater than at V.

If all the waves are similar in form and magnitude to those indicated, then it can be assumed that the multiplex portion of the receiver is functioning properly and the problem lies ahead of this in the FM receiver. If any of the wave forms are missing at a latter point but are apparent at a previous point, then something is amiss in the circuitry between the two test points.

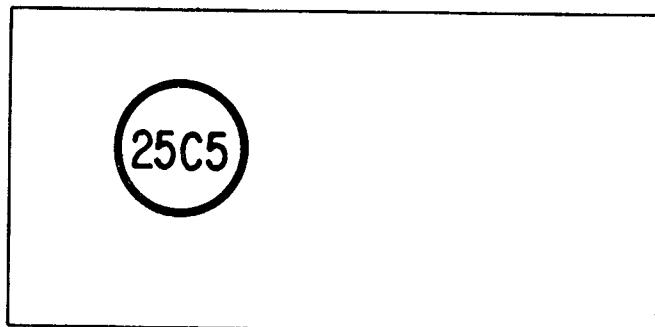




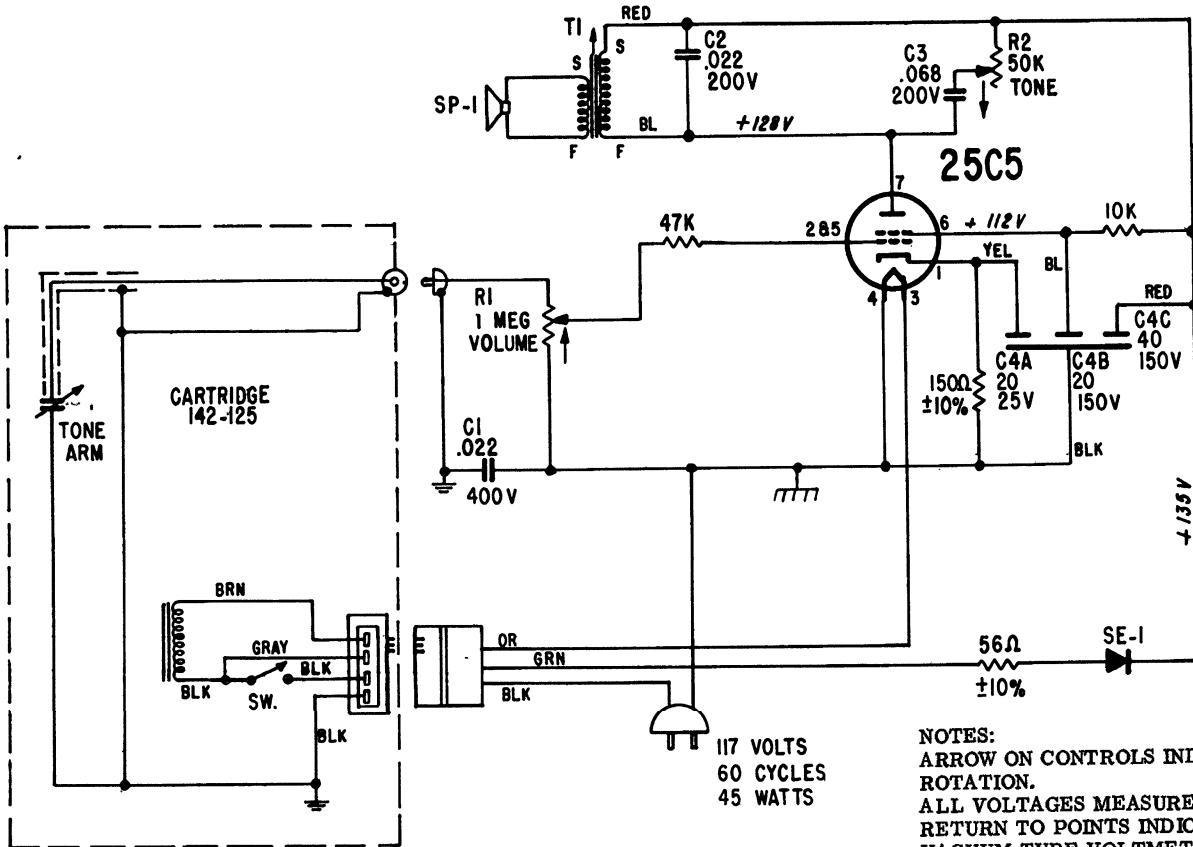
NOTES:  
ARROW ON CONTROLS INDICATES CLOCKWISE  
ROTATION.  
ALL VOLTAGES MEASURED FROM COMMON  
RETURN TO POINTS INDICATED WITH AN A.C. -  
D.C. VACUUM TUBE VOLTMETER.  
ALL VOLTAGES ARE D.C. UNLESS OTHERWISE  
SPECIFIED.  
ALL CAPACITOR VALUES IN MICROFARADS  
UNLESS OTHERWISE SPECIFIED.  
ALL RESISTORS ARE  $\pm 20\%$  TOLERANCE, 1/2  
ATT CARBON UNLESS OTHERWISE SPECIFIED.

 DENOTES COMMON RETURN B- -  DENOTES CHASSIS

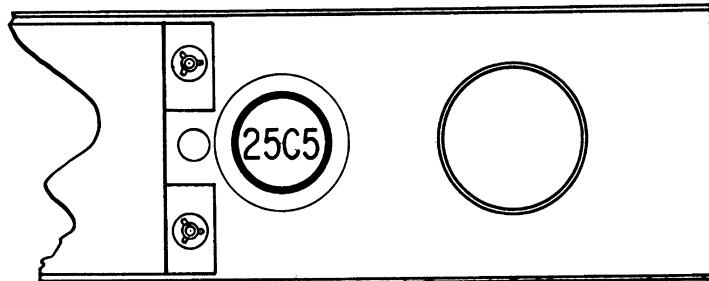
## 1L20 SCHEMATIC FOR MODEL ZP2



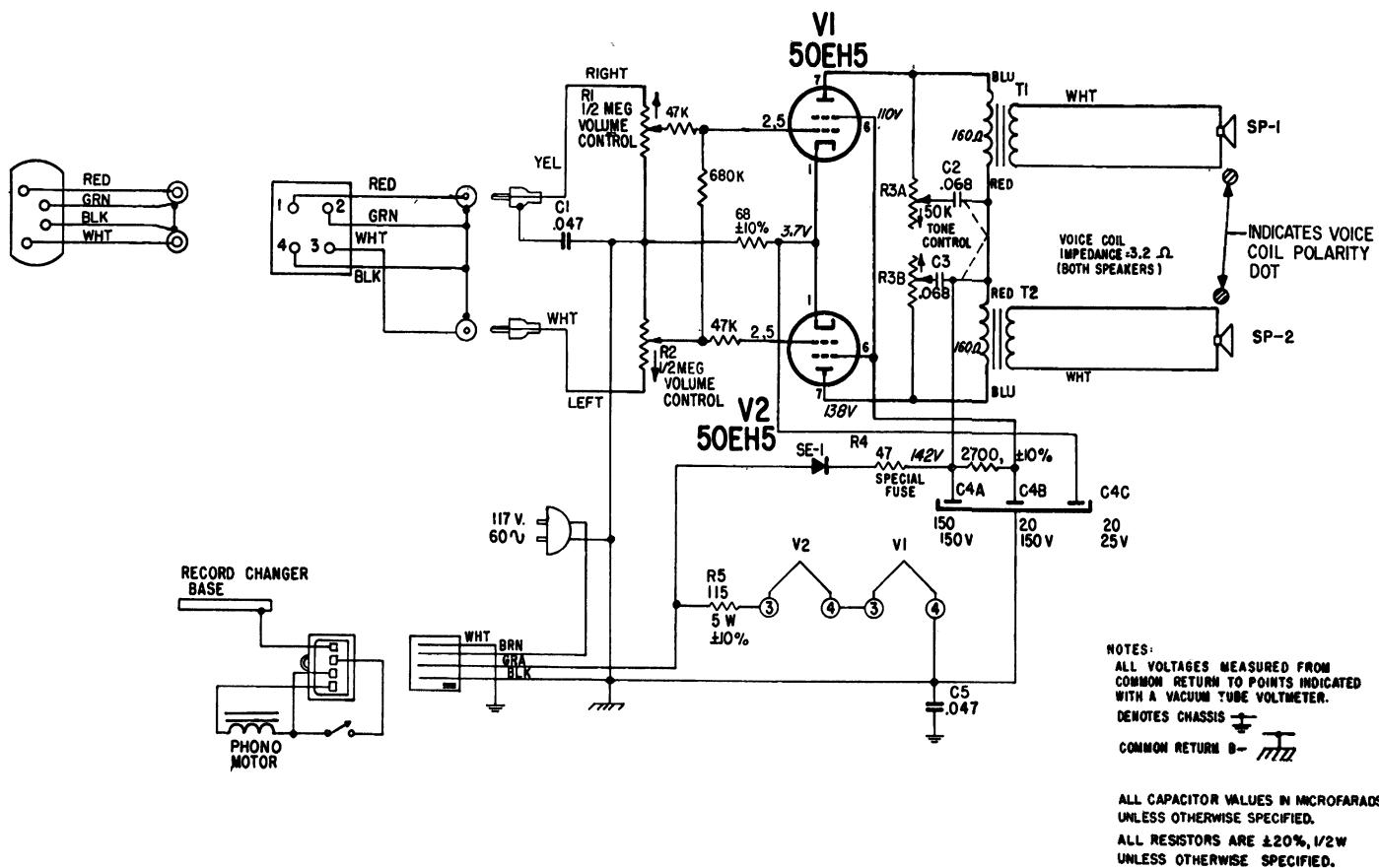
## 1L20 TUBE LAYOUT FOR MODEL ZP2



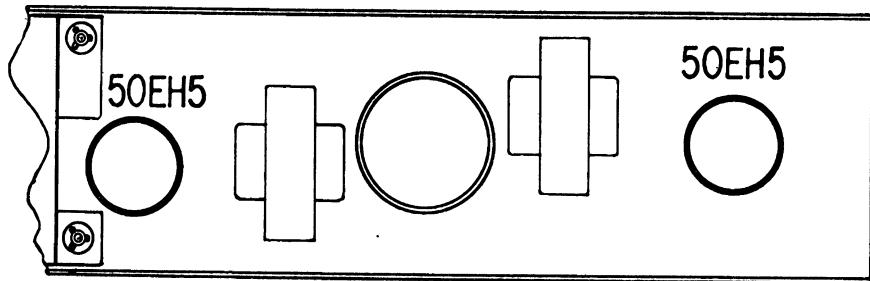
1L21 SCHEMATIC FOR MODEL LP8.



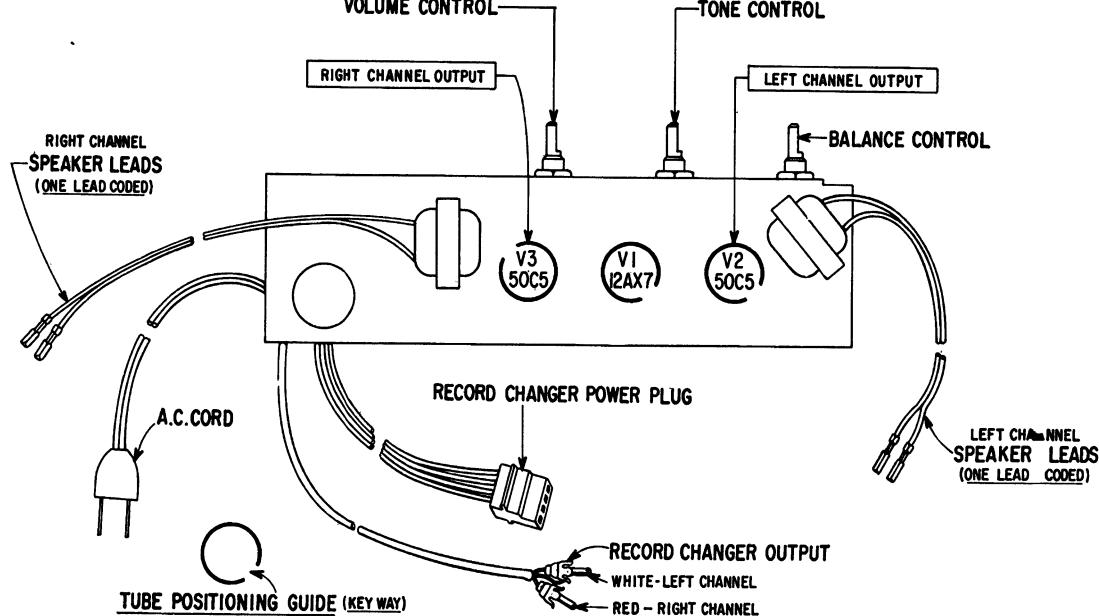
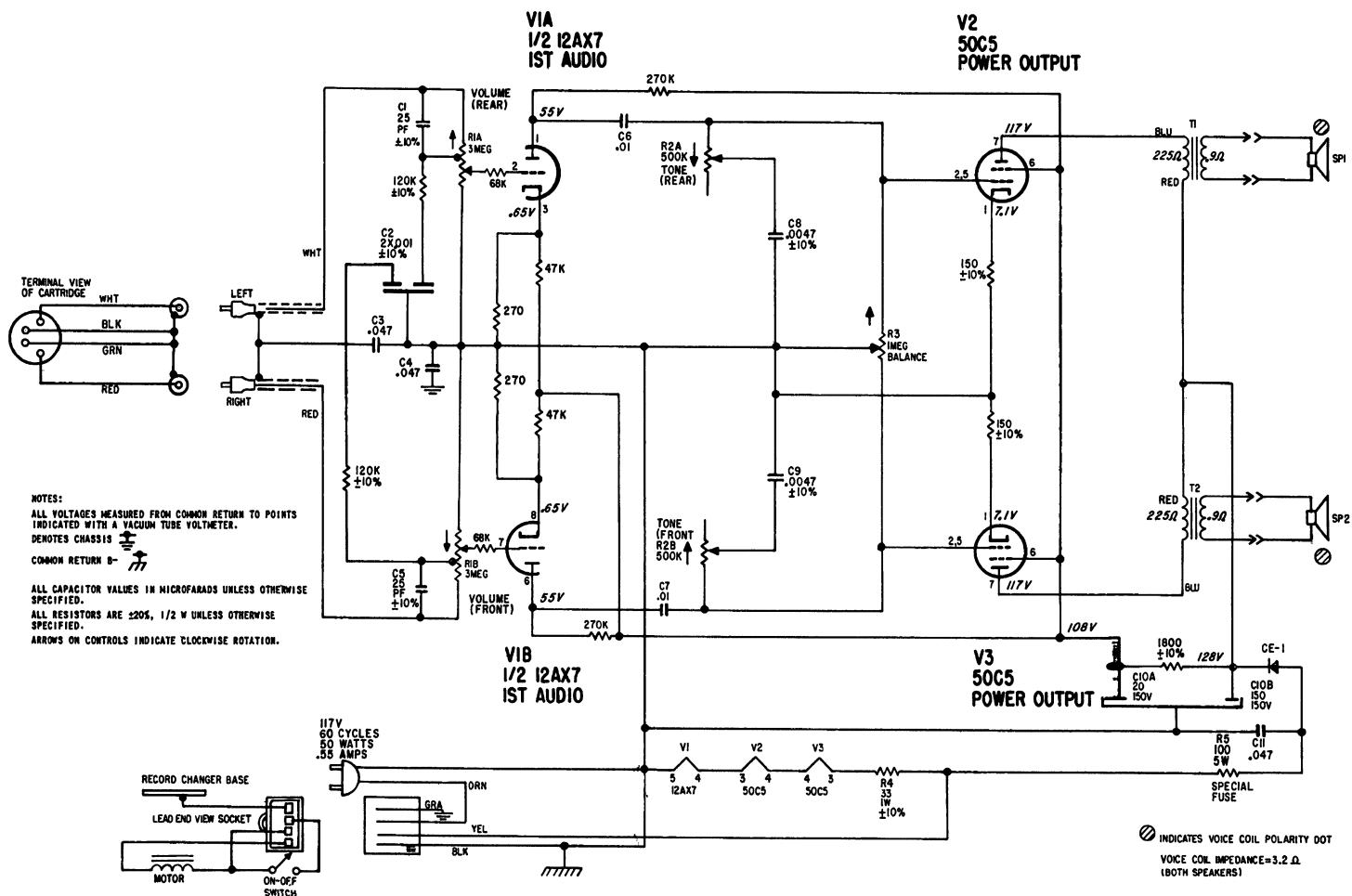
1L21 TUBE LAYOUT FOR MODEL LP8.



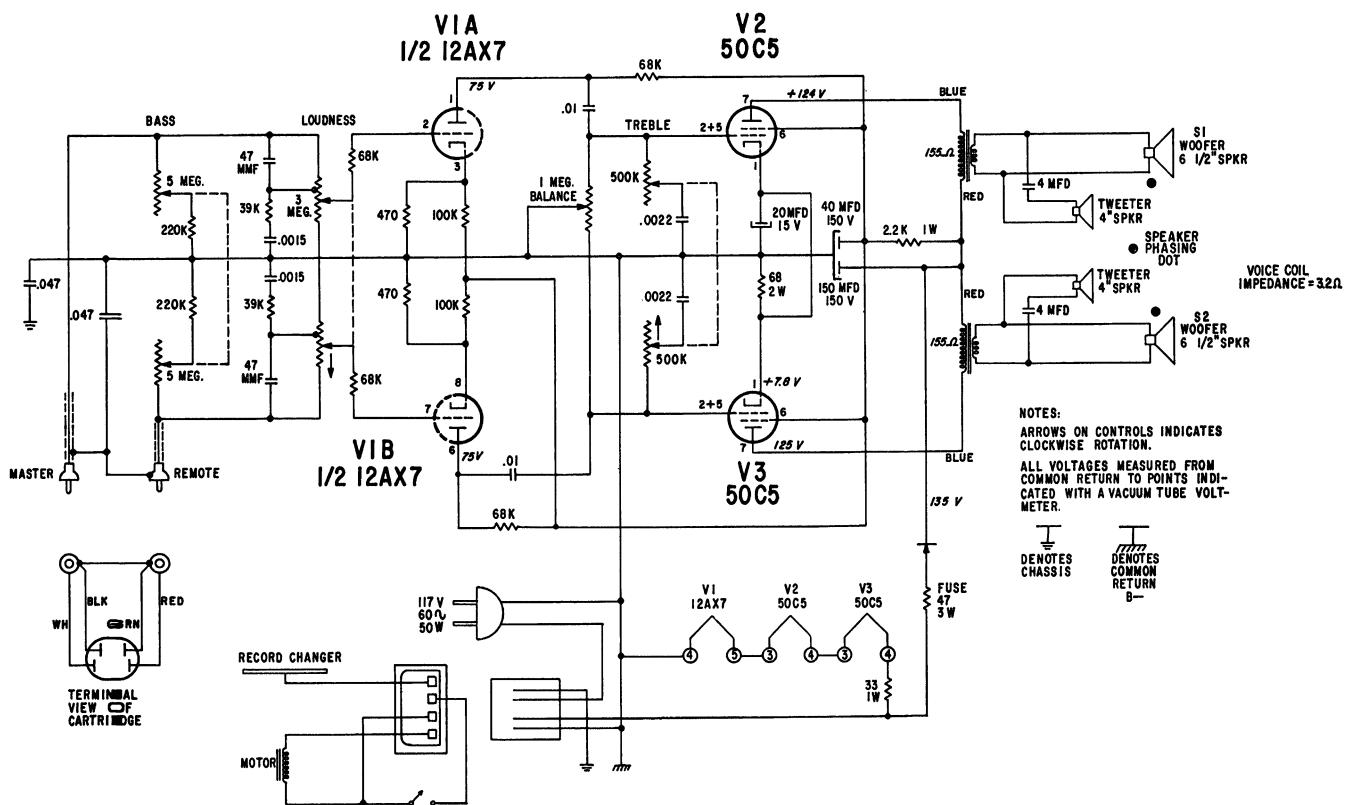
2L20 SCHEMATIC FOR MODEL LPS45



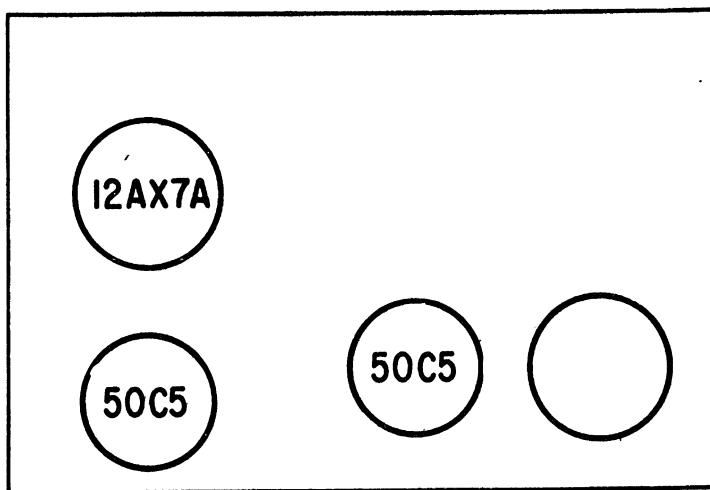
2L20 TUBE LAYOUT FOR MODEL LPS45



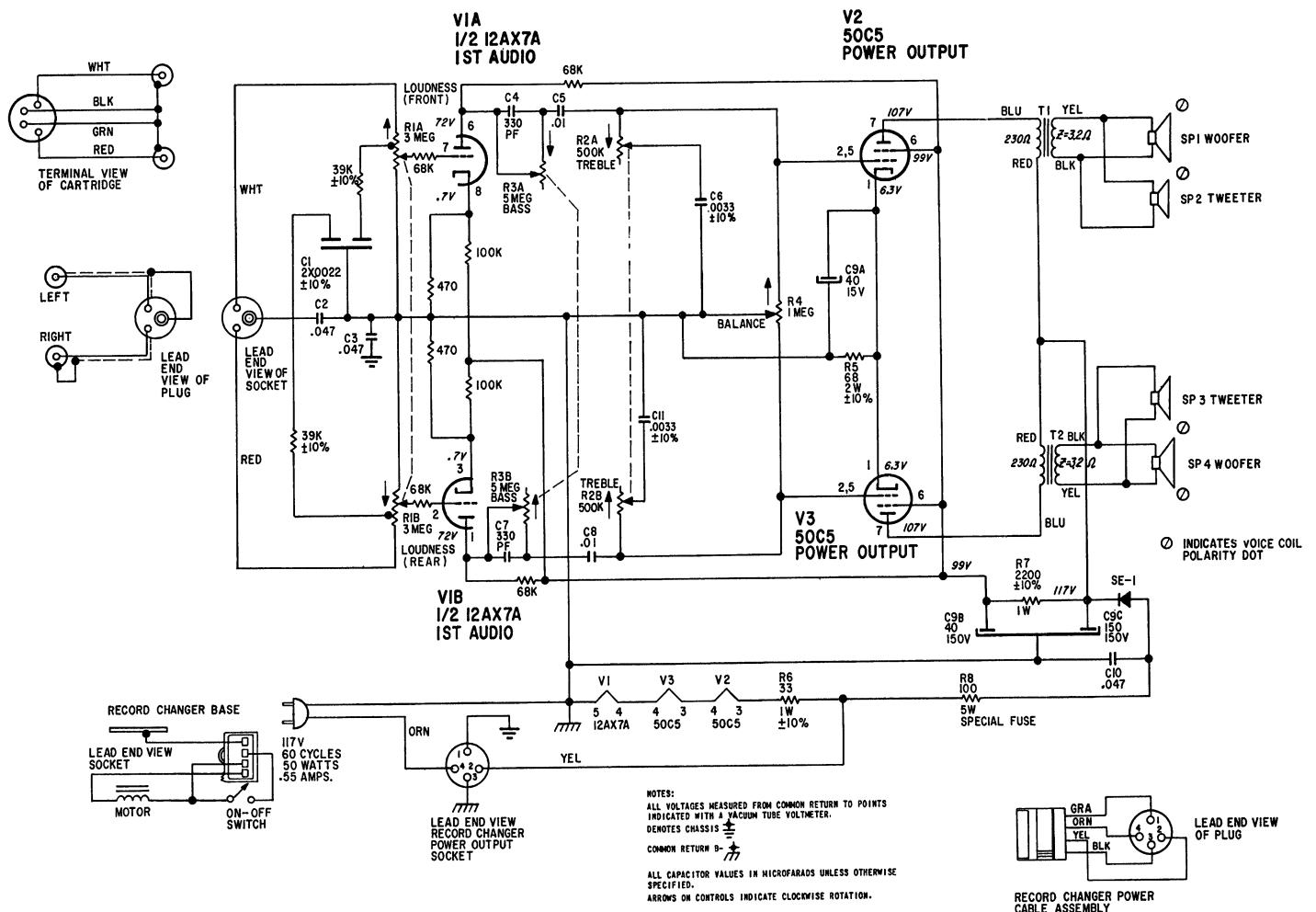
**3L03 TUBE LAYOUT FOR LPS50**



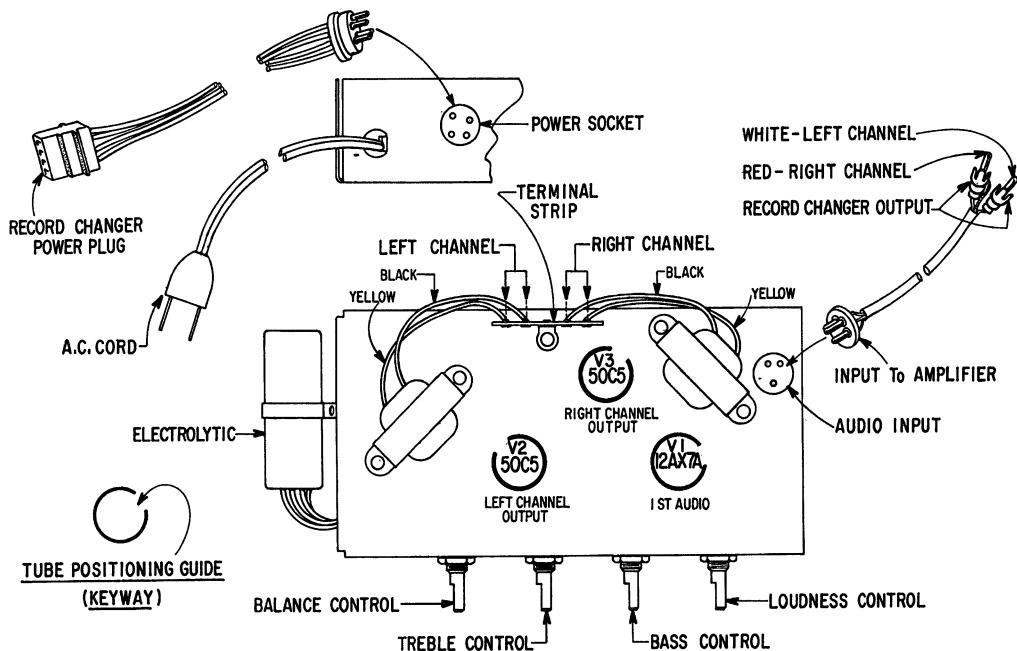
## SCHEMATIC FOR KPS70-1



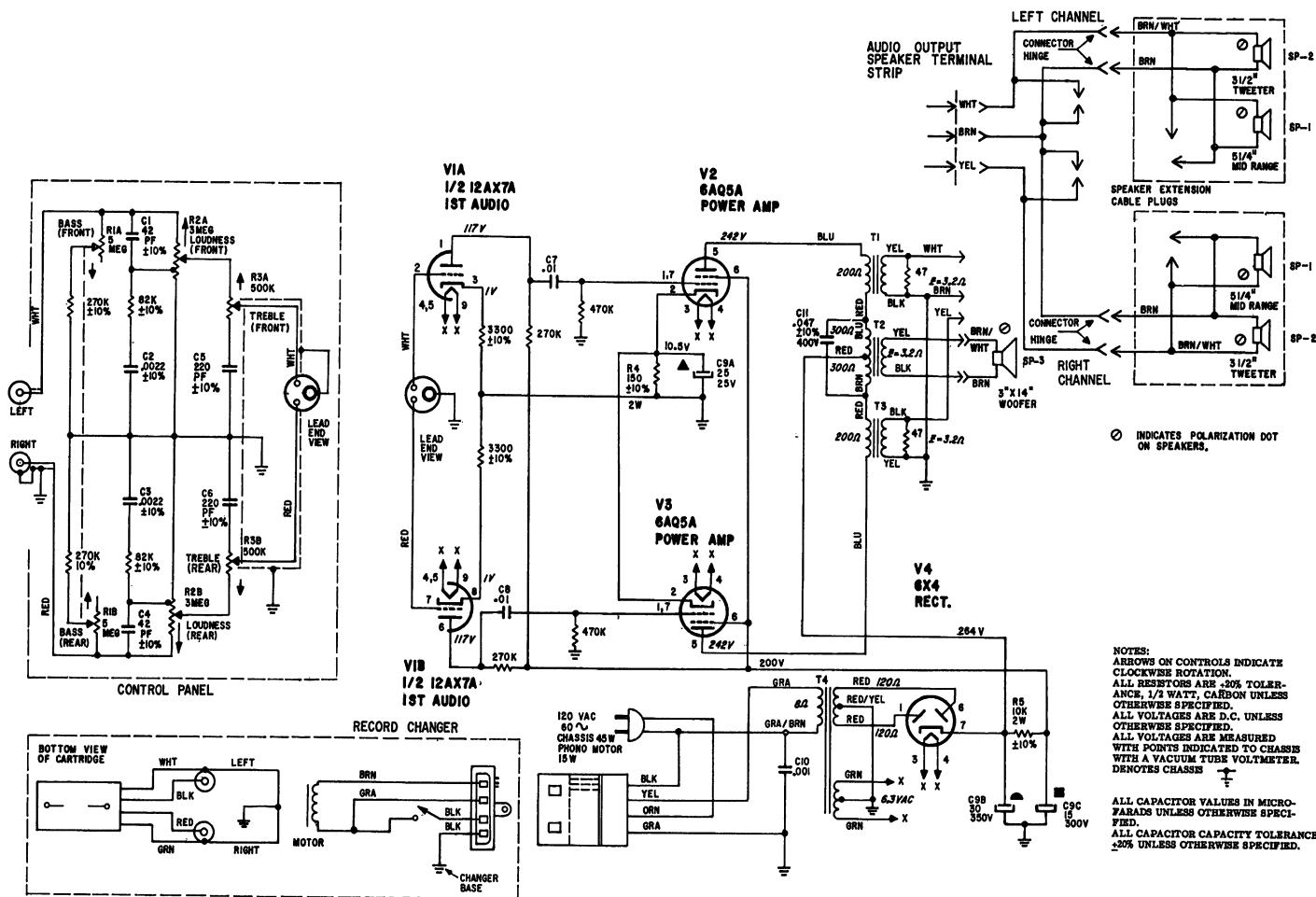
## **TUBE LAYOUT FOR KPS70-1**

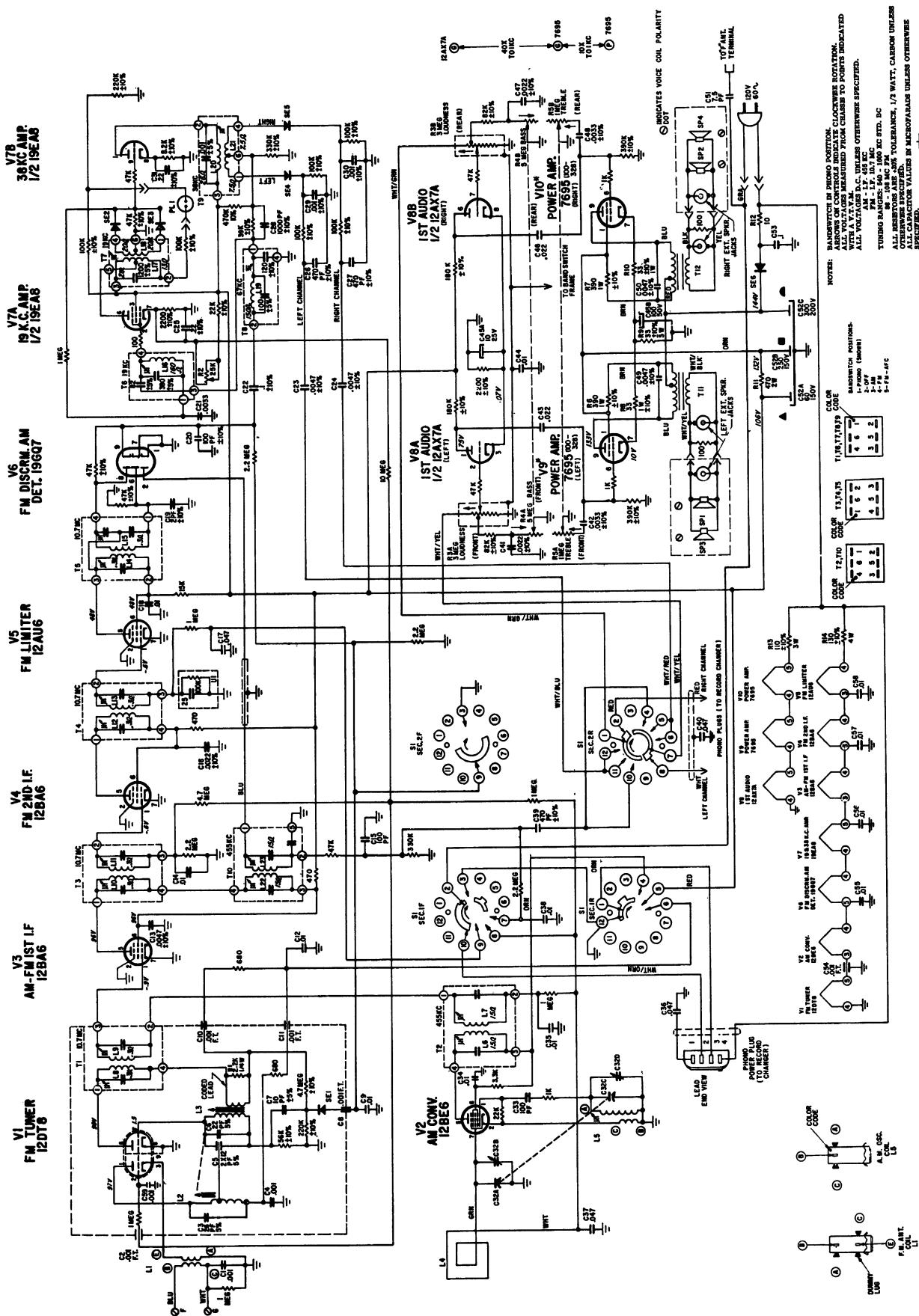


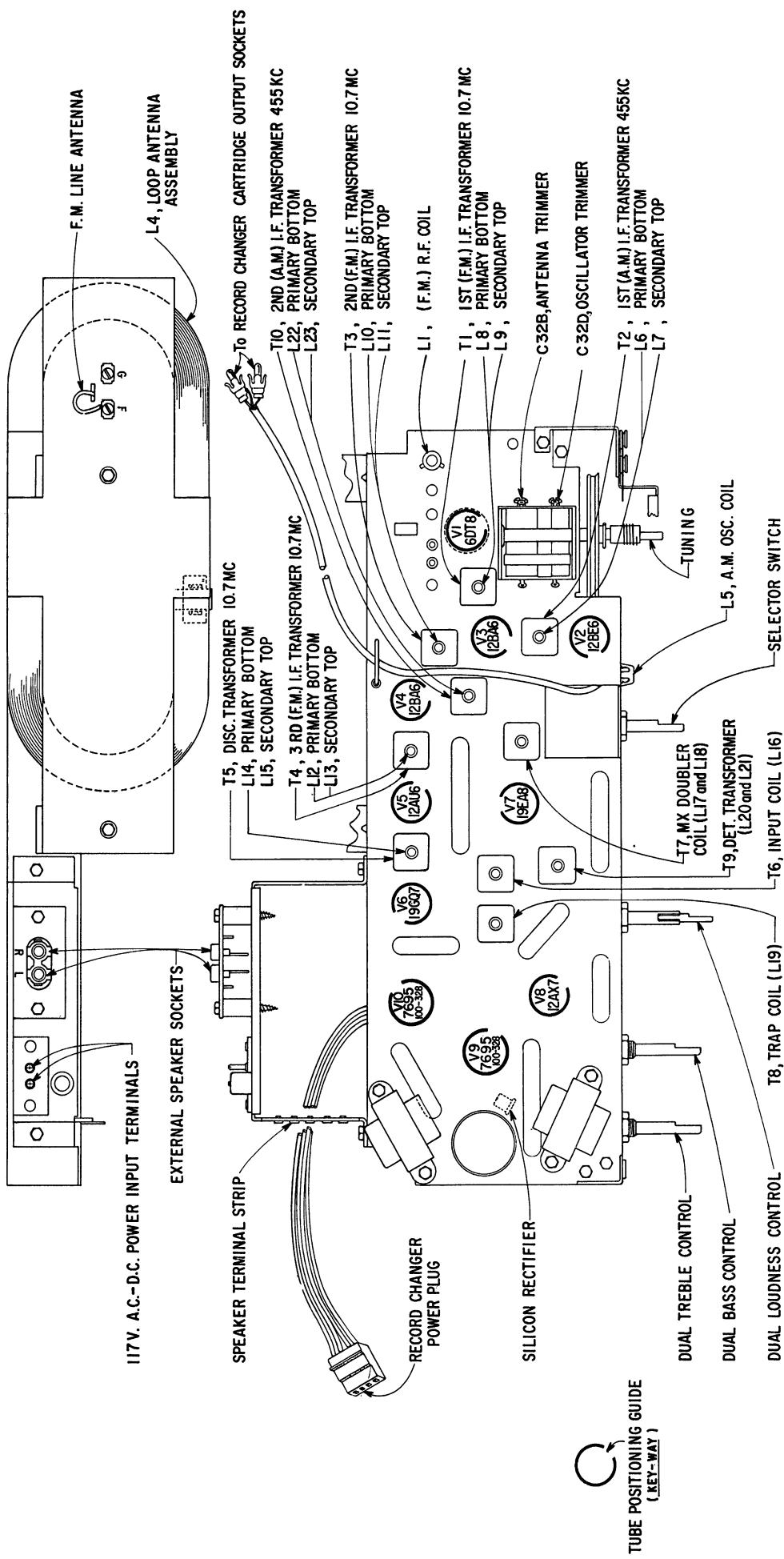
## 3L05 SCHEMATIC FOR LPS75

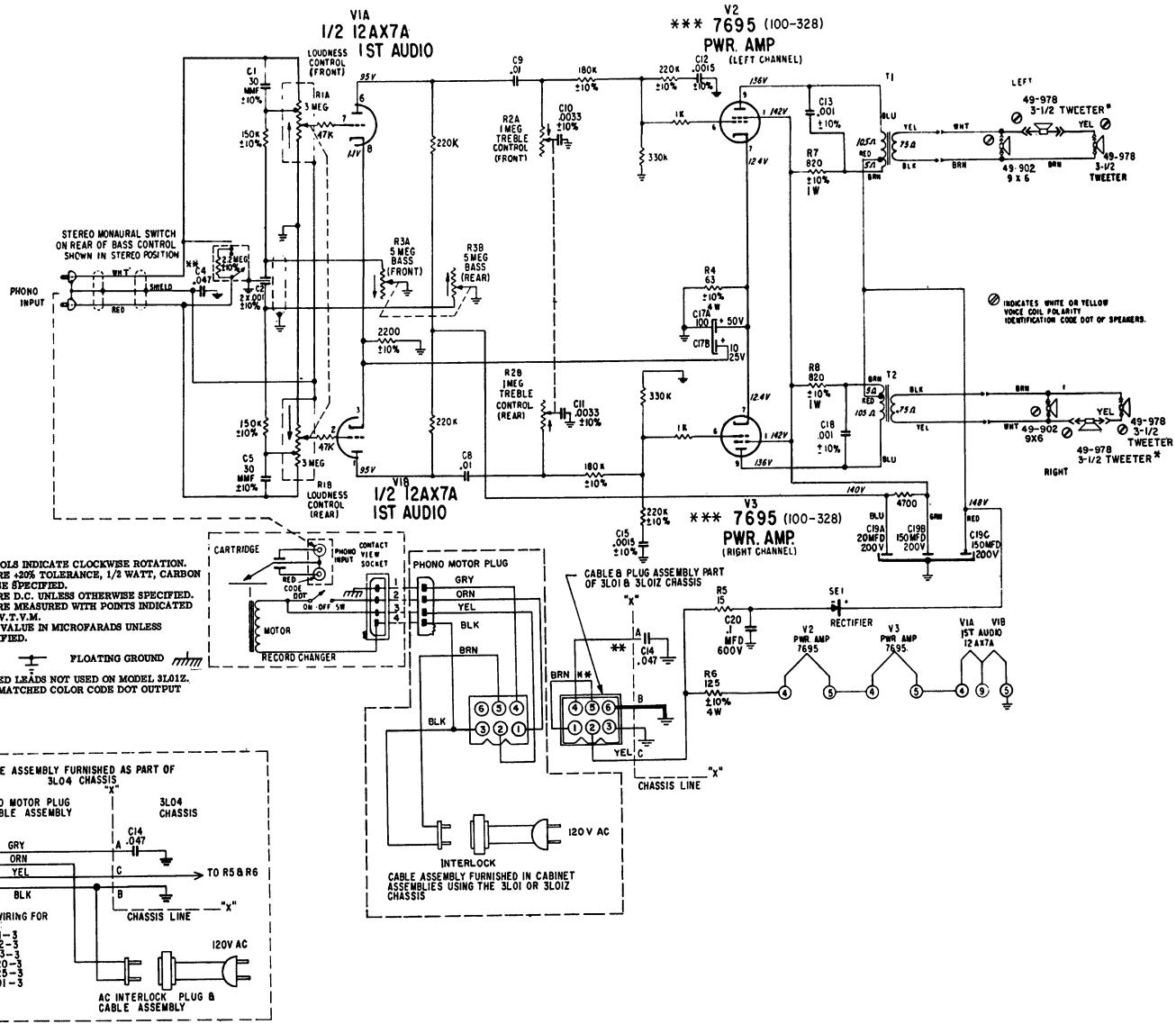


## 3L05 TUBE LAYOUT FOR LPS75









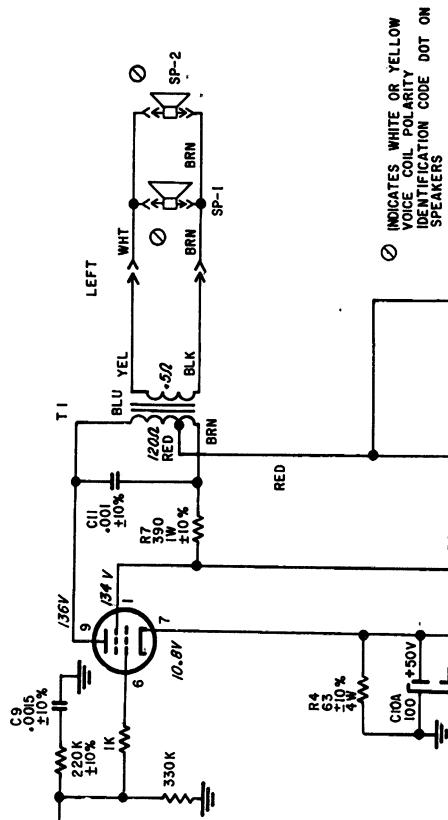
### 3L01 SCHEMATIC FOR MODEL SL2420

### 3L01Z SCHEMATIC FOR MODELS MP401 AND RP401

### 3L04 SCHEMATIC FOR MODELS ST1951-3, SL2420-3 AND SL2501-3

## V1A 1/2 12AX7A 1ST AUDIO

## \*V2 7695 (100-328) PWR. AMP. (LEFT CHANNEL)



① INDICATES WHITE OR YELLOW  
VOICE COIL POLARITY  
ON SPEAKERS  
IDENTIFICATION CODE DOT ON

RIGHT

①  
WHT  
BRN  
BLK

## \*V3 7695 (100-328) PWR. AMP. (RIGHT CHANNEL)

RECTIFIER  
SE-1+

140V  
GRN  
R9 2W  
C14B 300  
C14C 150  
150V  
200V

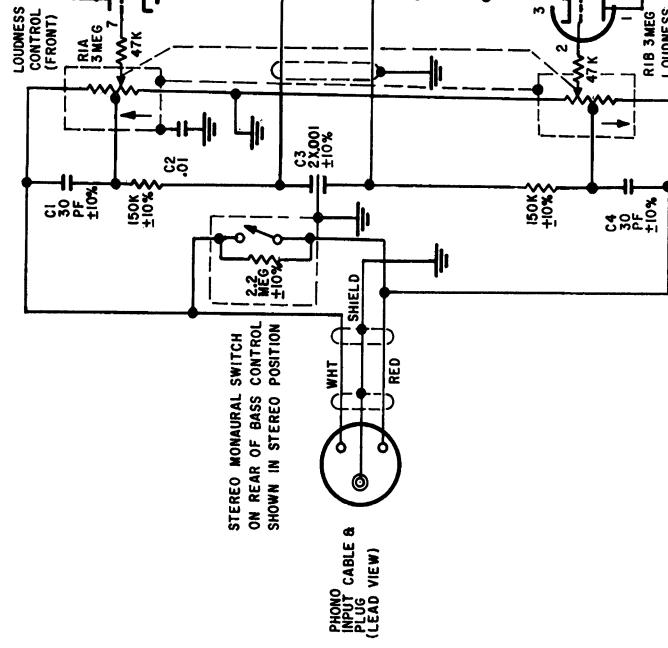
VIA VIB  
1ST AUDIO  
12AX7A  
PWR. AMP.  
V2 7695  
PWR. AMP.  
R5 600V  
C15 0.01  
FUSING TYPE  
BLK

VIA VIB  
1ST AUDIO  
12AX7A  
PWR. AMP.  
V2 7695  
PWR. AMP.  
R5 600V  
C15 0.01  
FUSING TYPE  
BLK

120 VAC  
INTERLOCK  
POWER PLUG  
FOR 6101 OR  
7101 RADIO  
CHASSIS.

3L02 SCHEMATIC FOR MODELS MT1951-3, RL2420-3, ML2420-3, ML2601-3, RL2601-3, ML2602-3, RL2602-3, ML2603-3 & ML2603-3

## V1B 1/2 12AX7A 1ST AUDIO

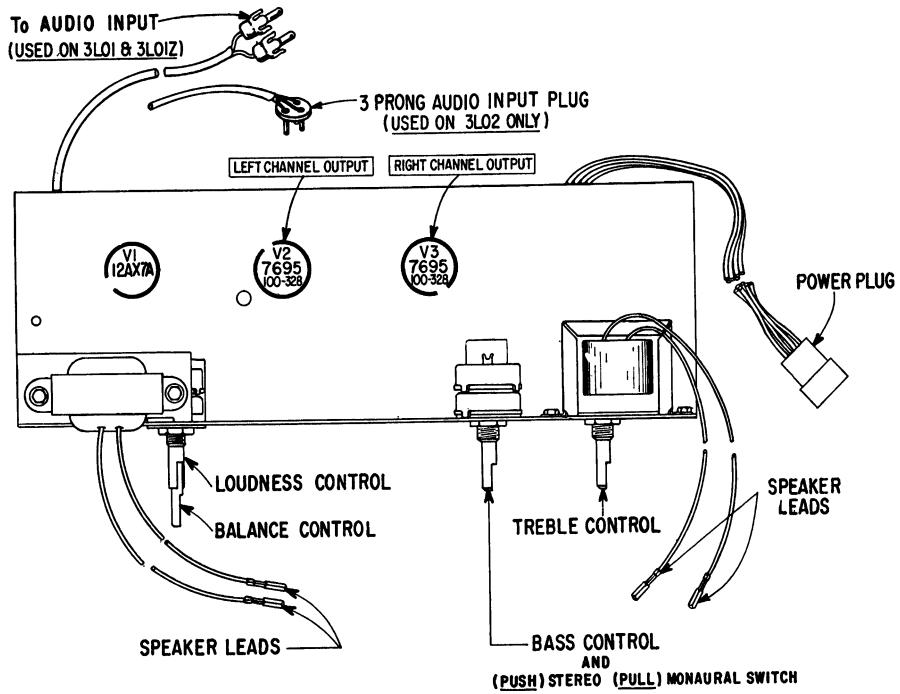


FOR RL1925, RL2420, AND RL2601 AM-FM RADIO CIRCUIT USED WITH THIS  
AMPLIFIER. REFER TO 6101 SCHEMATIC. #122-2804  
FOR HT1925, HL2420, AND HL2601 AM-FM STEREO RADIO CIRCUIT REFER  
TO 7101 SCHEMATIC. #123-2817

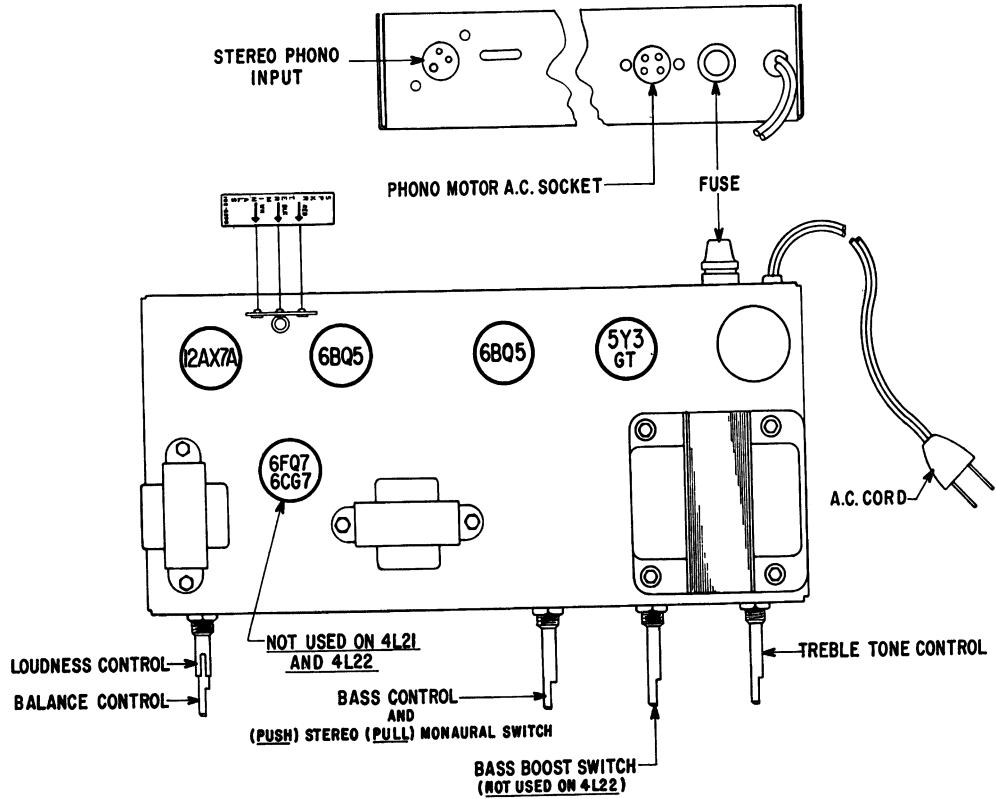
NOTES:  
ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION.  
ALL RESISTORS ARE ±20% TOLERANCE, 1/2 WATT CARBON  
UNLESS OTHERWISE SPECIFIED.  
ALL VOLTAGES ARE D.C. UNLESS OTHERWISE SPECIFIED.  
ALL VOLTAGES ARE MEASURED WITH POINTS INDICATED TO  
CHASSIS WITH V1A.  
ALL CAPACITORS VALUE IN MICROFARADS UNLESS  
OTHERWISE SPECIFIED.  
DENOTES CHASSIS

ALL CAPACITORS TOLERANCES ±20% UNLESS OTHERWISE  
SPECIFIED.

\* BOTH OUTPUT TUBES (V2B V3) ON ANY GIVEN CHASSIS MUST  
HAVE IDENTICAL COLOR DOTS ON THEIR EXHAUST TIPS.



3L01, 3L01Z, 3L02 AND 3L04 TUBE LAYOUT FOR MODELS MP401, RP401, SL2450, ST1951-3, SL2420-3, SL2501-3, MT1951-3, RL2420-3, ML2420-3, ML2601-3, RL2602-3, RL2603-3, ML2602-3 & ML2603-3



4L21, 4L22 AND 5L29 TUBE LAYOUT FOR MODELS MT1971-3, ML2605-3, ML2606-3, ML2607-3 & 7000-3

SEE 123-2688 (4L21)  
SHEET NO. 2  
FOR SPEAKER CIRCUITS

**V2**  
**6BQ5**  
**PWR AMP**  
(100-224)

LEFT CHANNEL  
OUTPUT

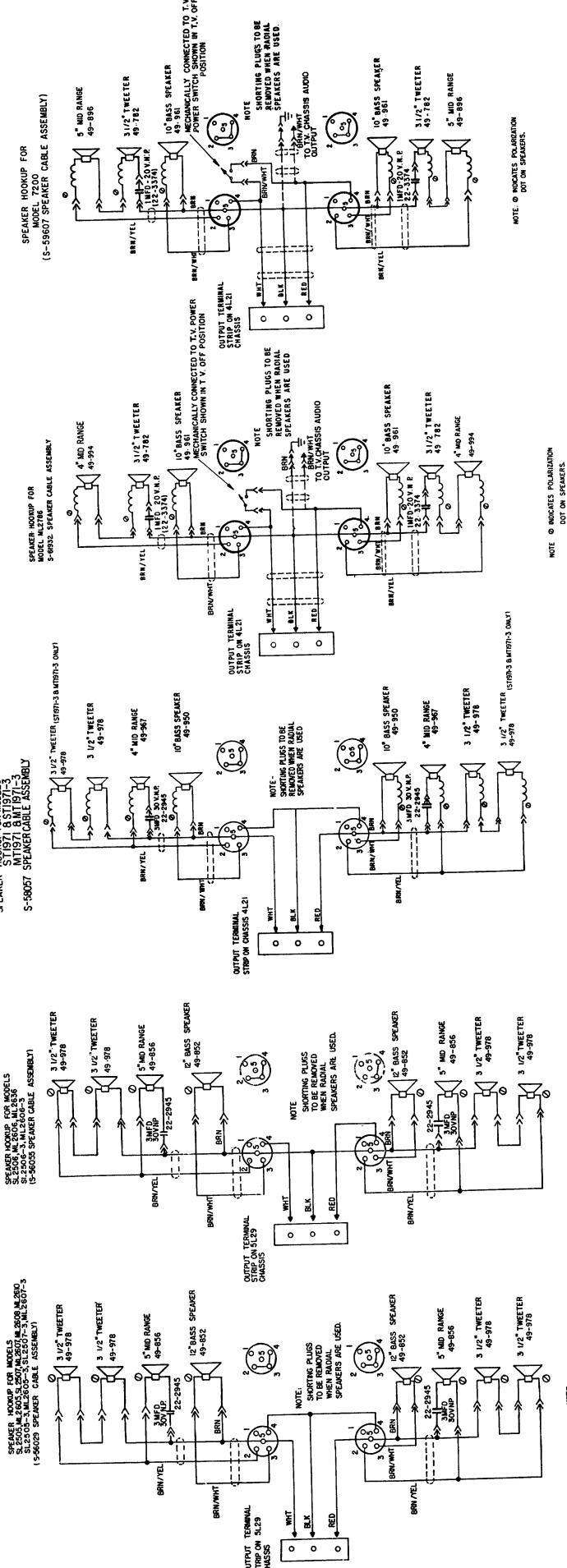
BLU.

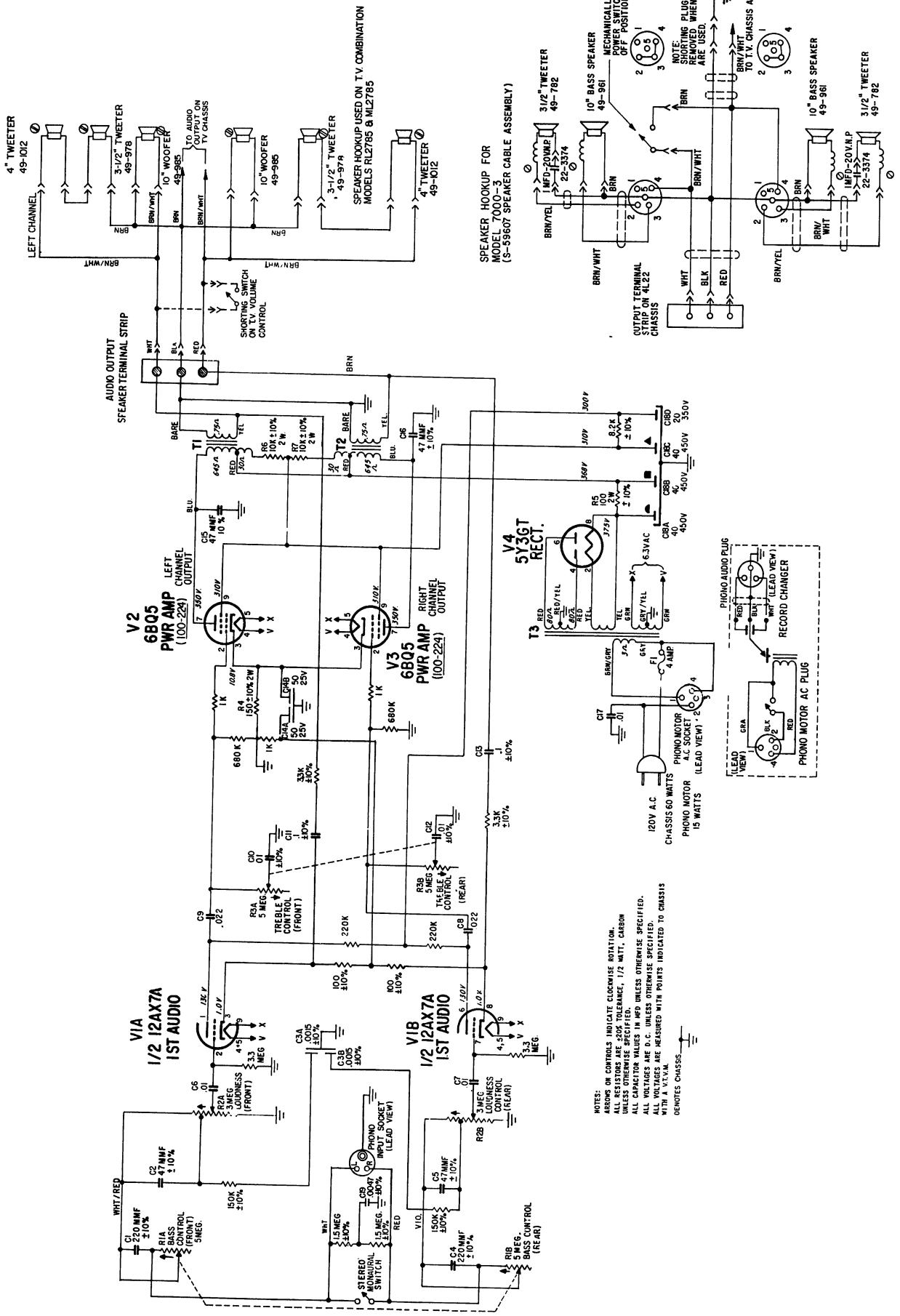
BARE

YEL.

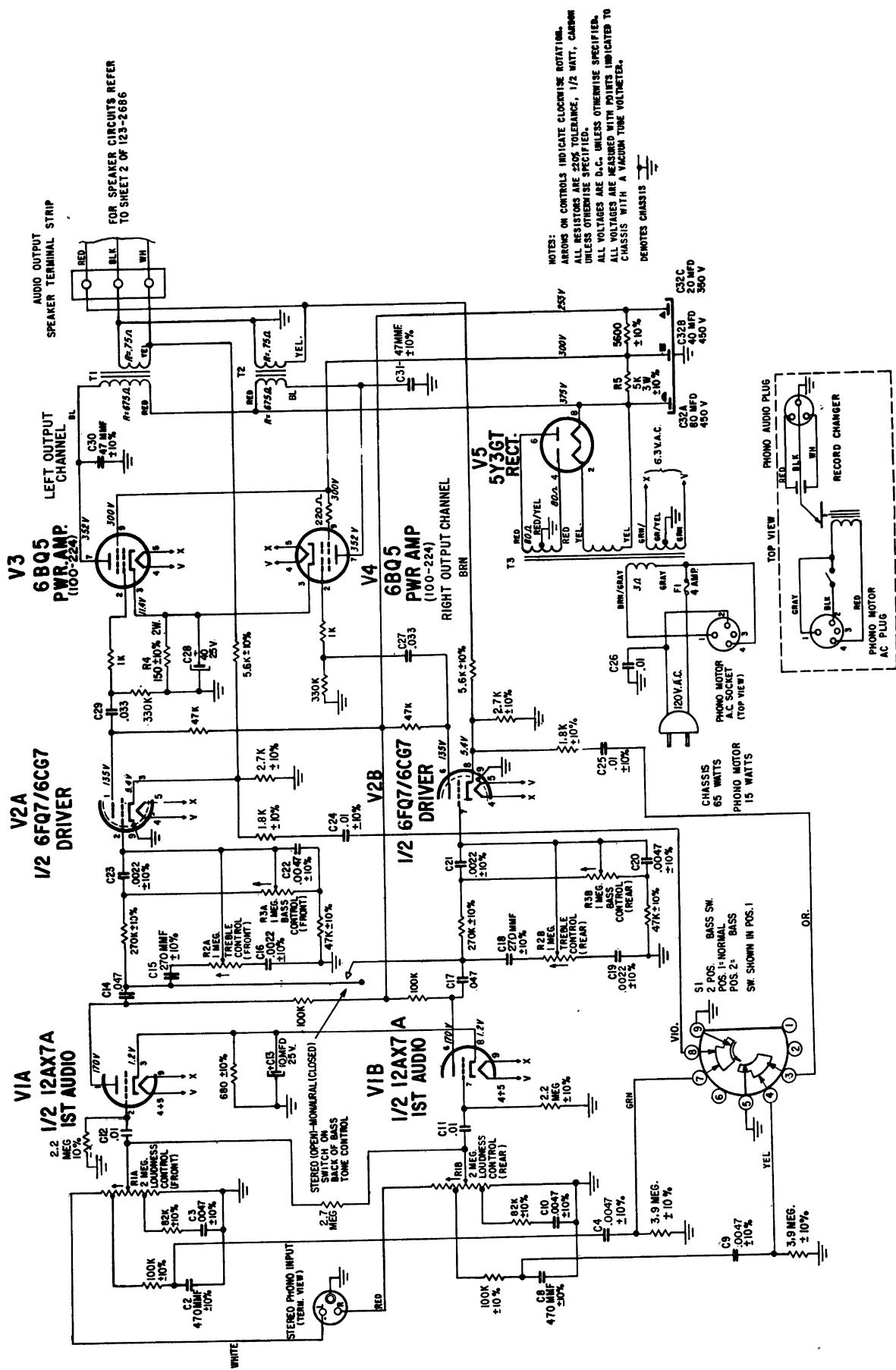
BLU.

BARE

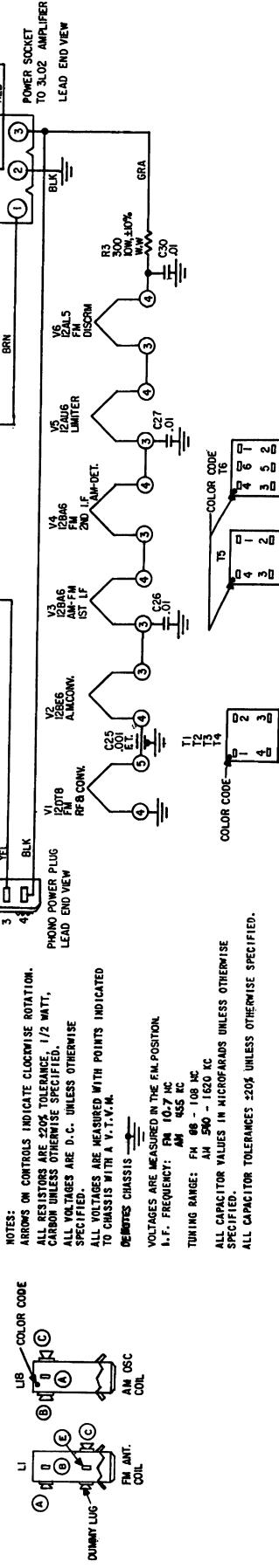
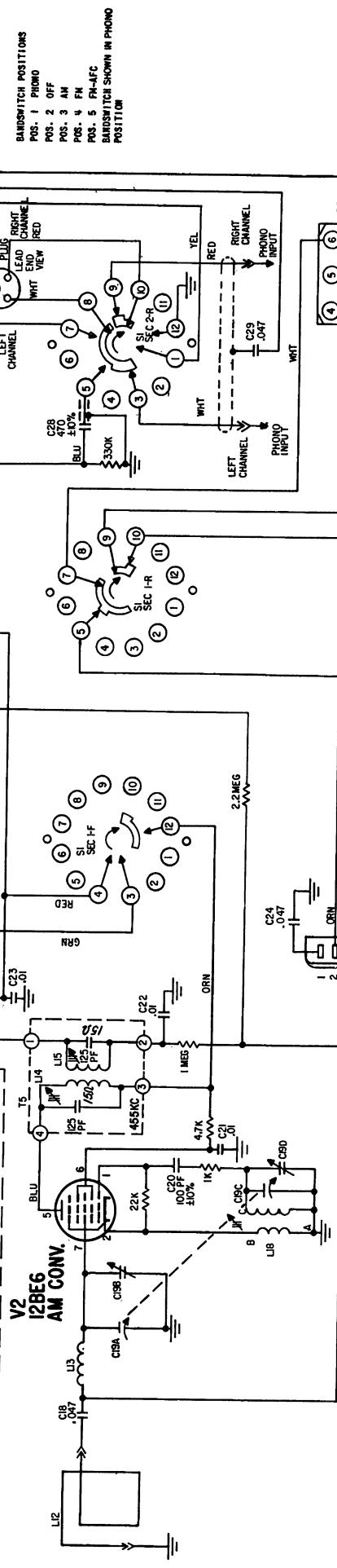
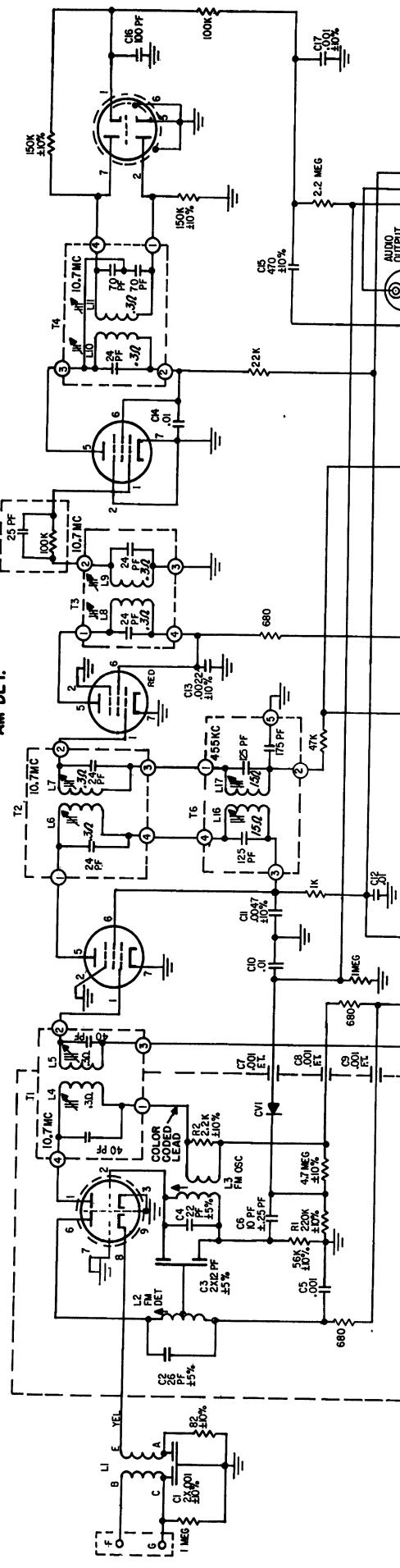




4L22 SCHEMATIC FOR MODEL-7000-3



**FM**  
**AM-FM**  
**RF & CONV.**



NOTES:

ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION.  
 ALL RESISTORS ARE  $\pm 20\%$  TOLERANCE, 1/2 WATT,  
 CARBON UNLESS OTHERWISE SPECIFIED.  
 ALL VOLTAGES ARE D. C. UNLESS OTHERWISE  
 SPECIFIED.  
 ALL VOLTAGES ARE MEASURED WITH POINTS INDICATED  
 TO CHASSIS WITH A V.T.V.M.

DEFINITIONS: CHASSIS

VOLTAGES ARE MEASURED IN THE FM POSITION.

I.F. FREQUENCY: FM 10.7 MC

AM 455 KC

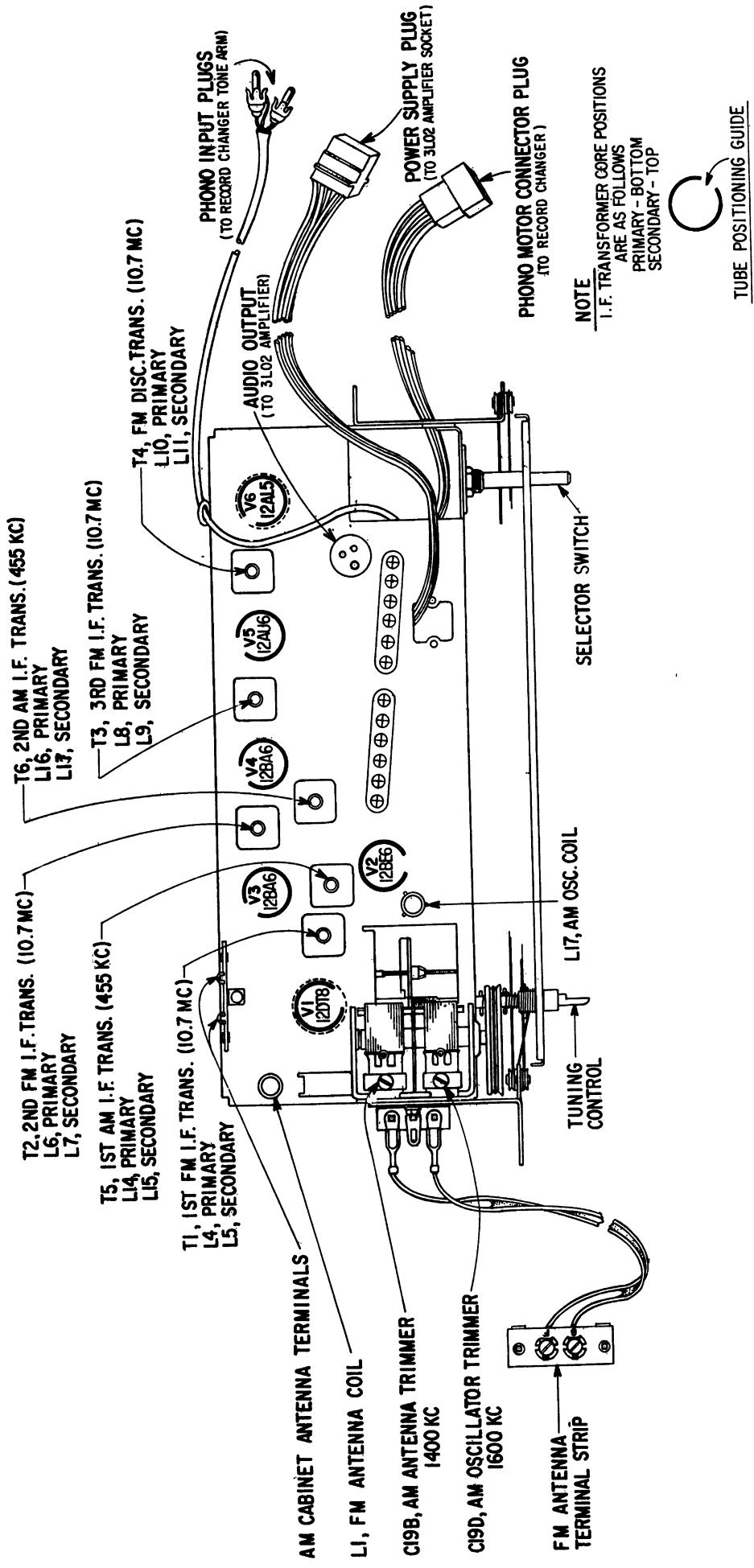
FM 98 - 108 KC

AM 540 - 1620 KC

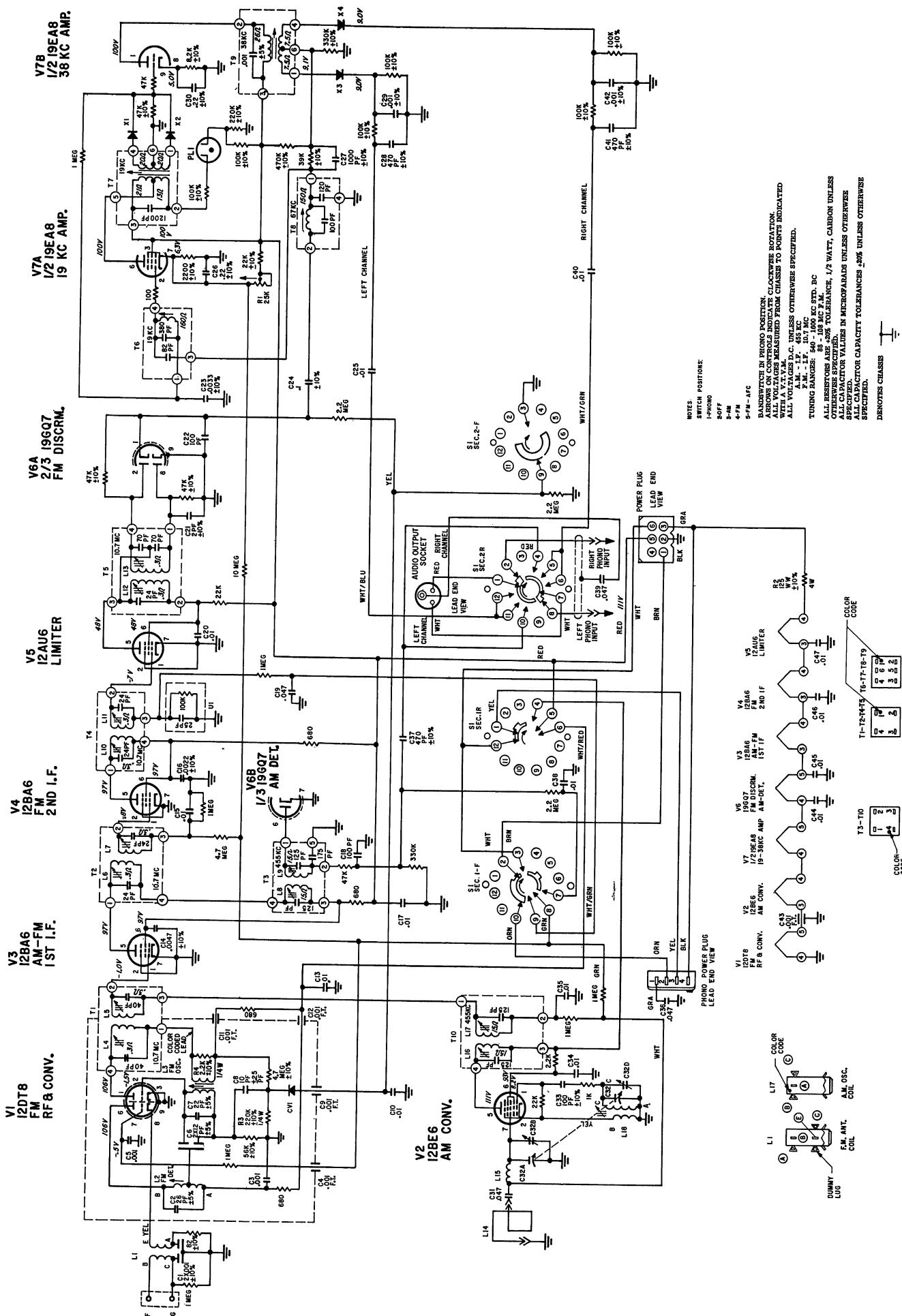
ALL CAPACITOR VALUES IN MICROFARADS UNLESS OTHERWISE  
 SPECIFIED.

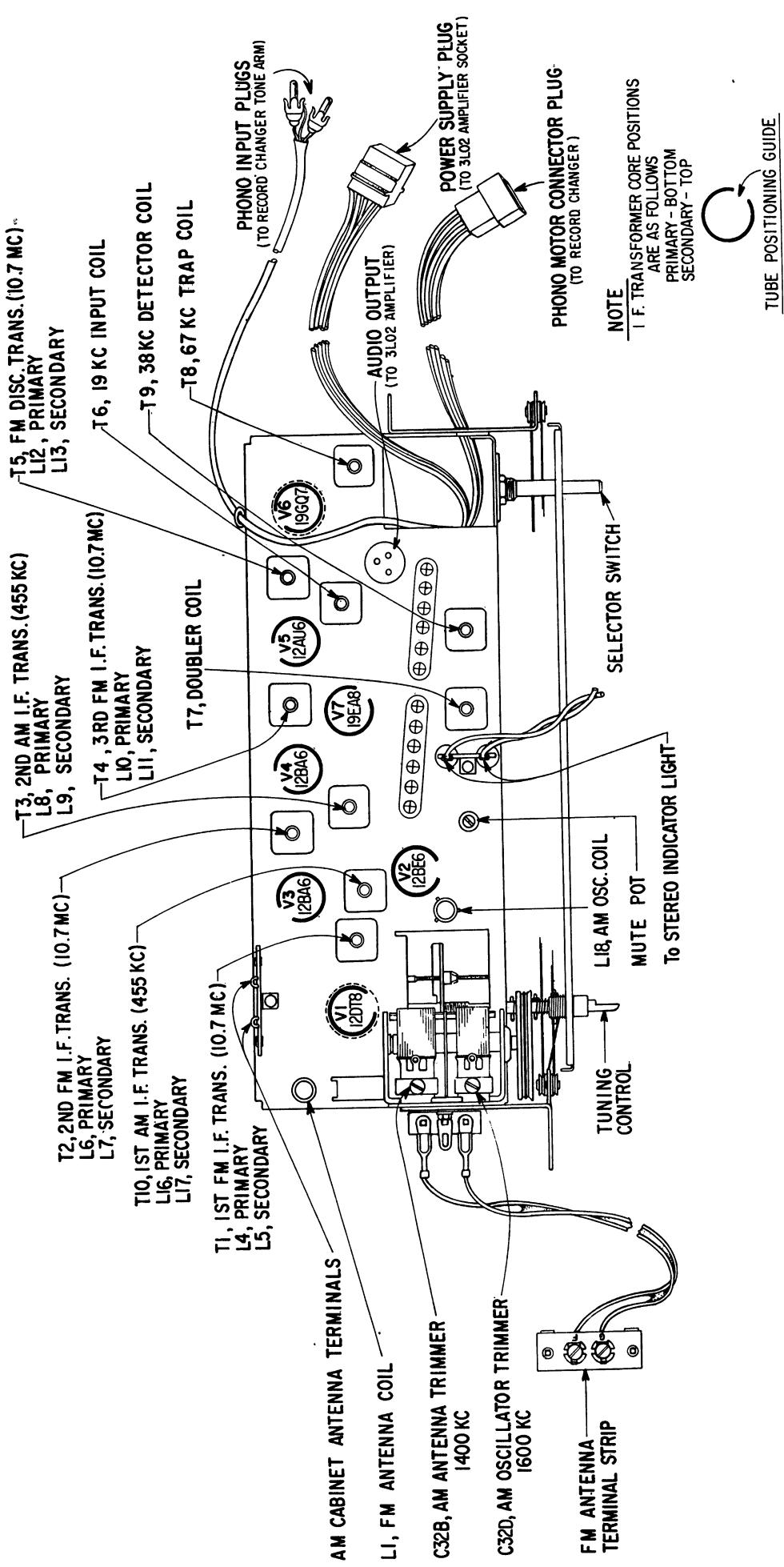
ALL CAPACITOR TOLERANCE  $\pm 20\%$  UNLESS OTHERWISE SPECIFIED.

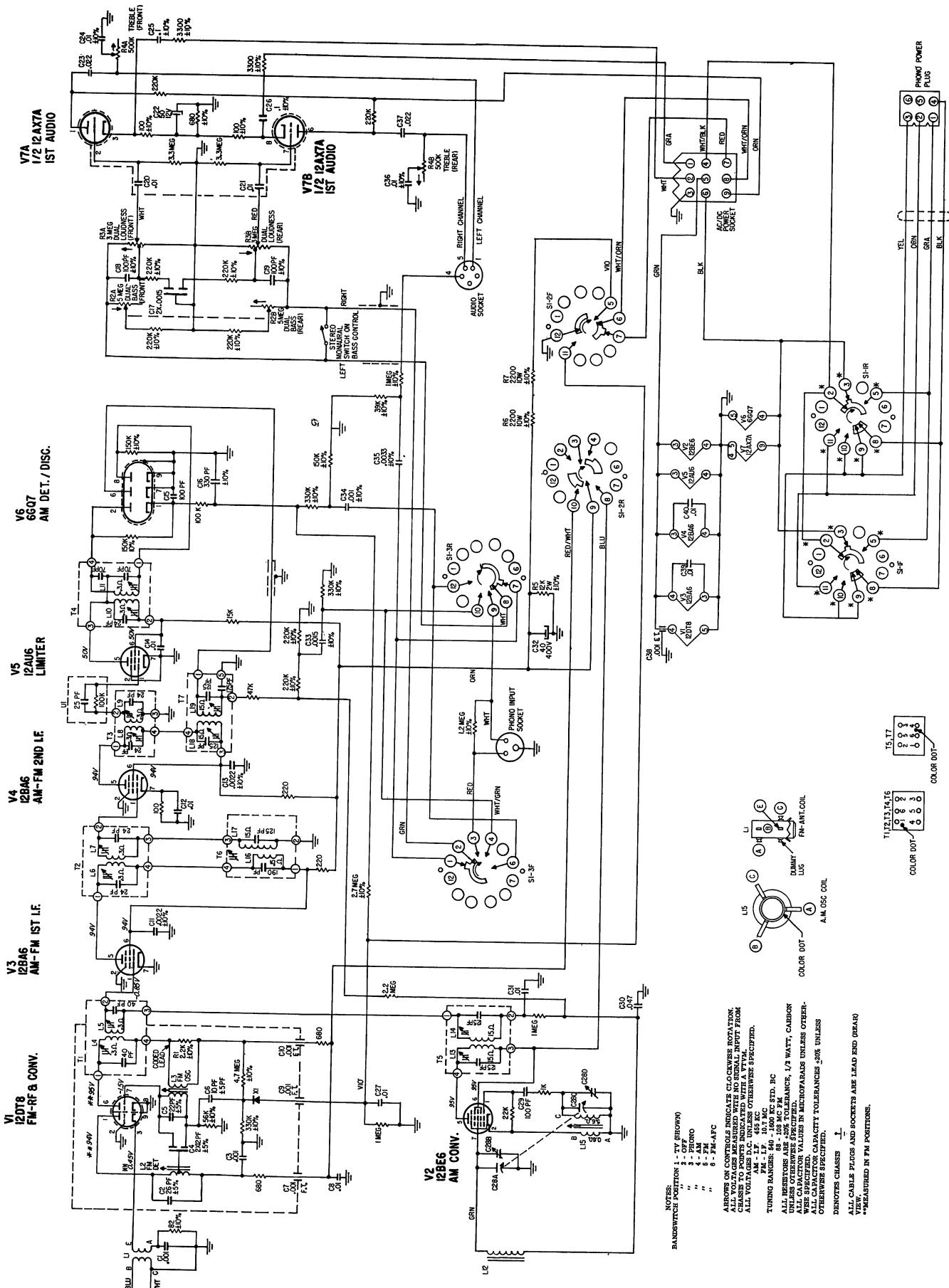
**6L01 SCHEMATIC FOR MODELS RL2420-3, RL2601-3, RL2602-3 AND RL2603-3**



6101 TUBE LAYOUT FOR MODELS RL2420-3, RL2601-3, RL2602-3 AND RL2603-3

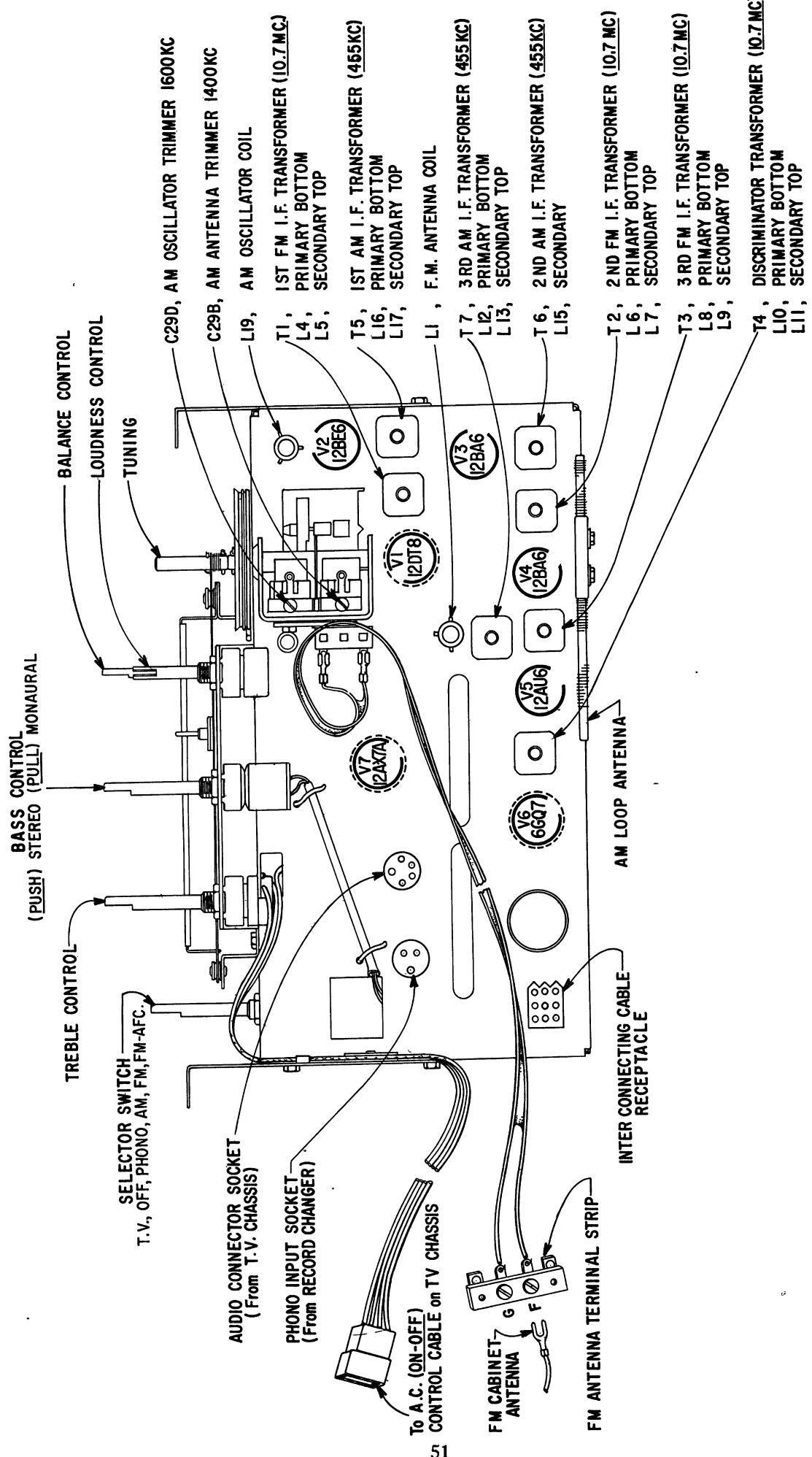






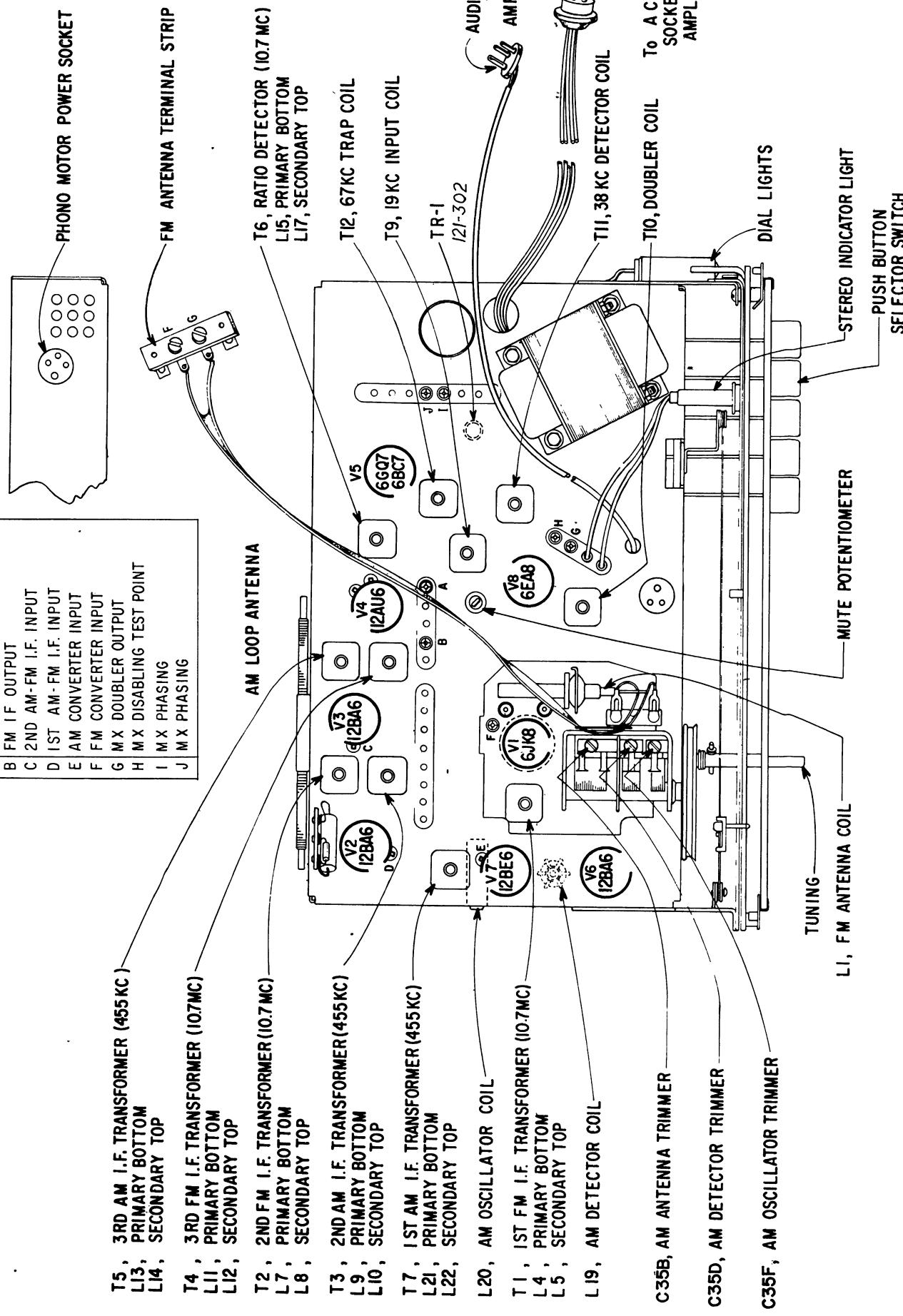
77L22 SCHEMATIC FOR MODEL BL2784-3

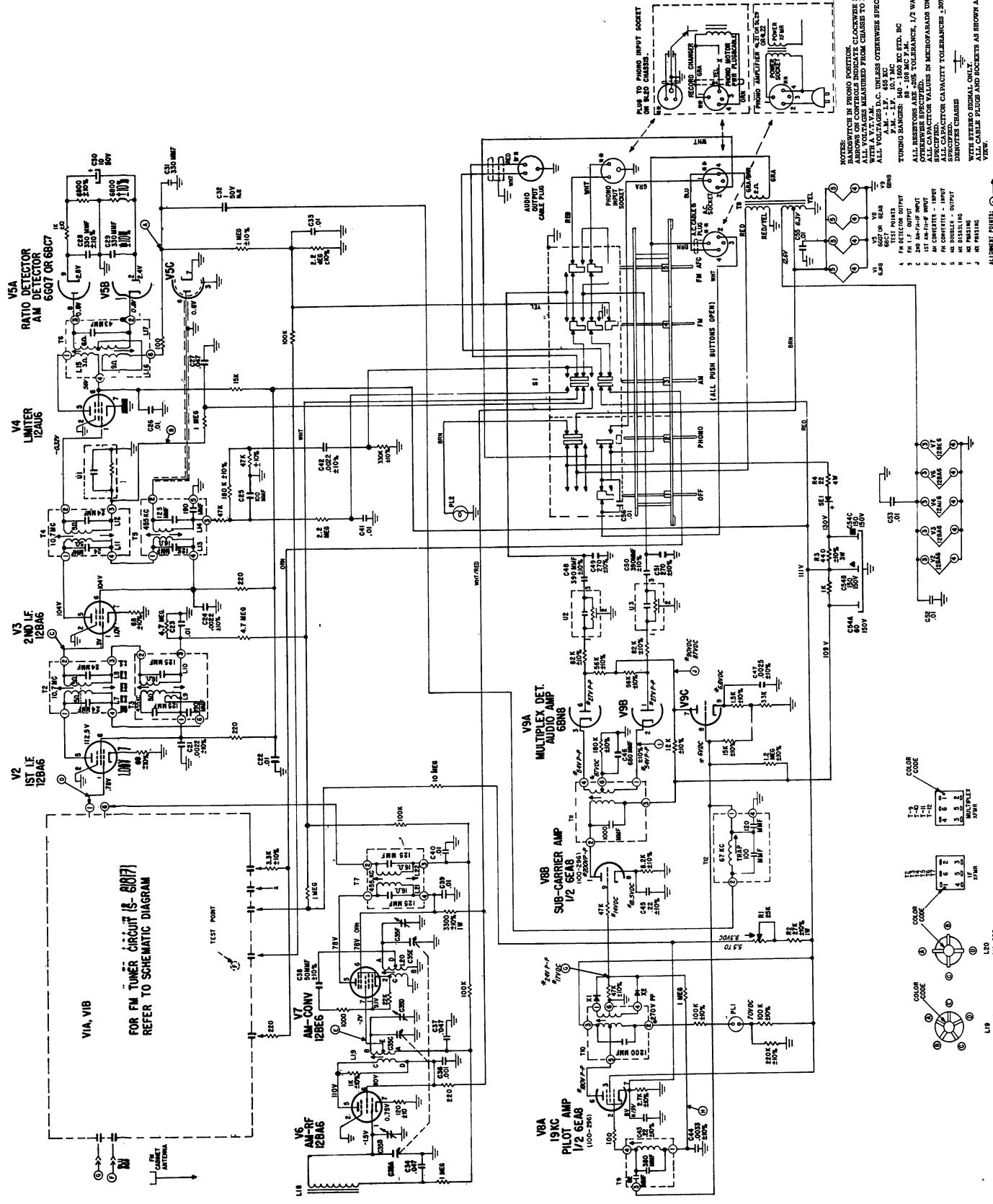
\* ROTOR BLADES ON OPPOSITE SIDE OF SWITCH  
ARE ELECTRICALLY CONNECTED

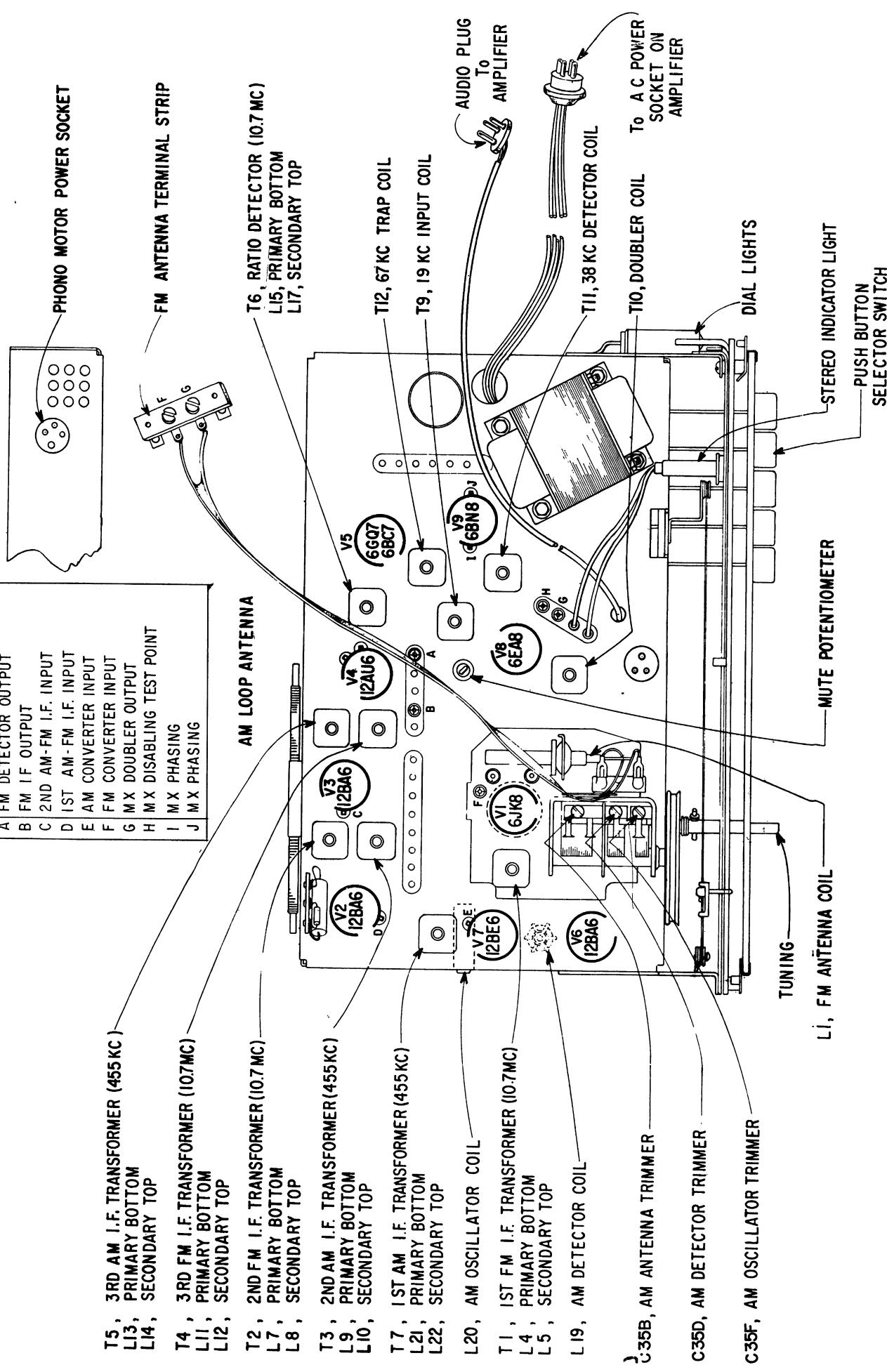
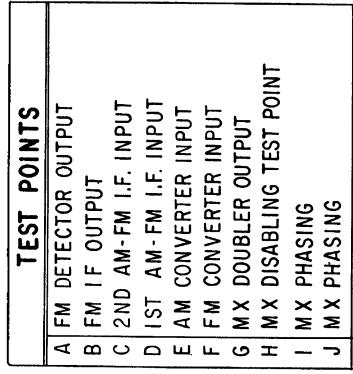


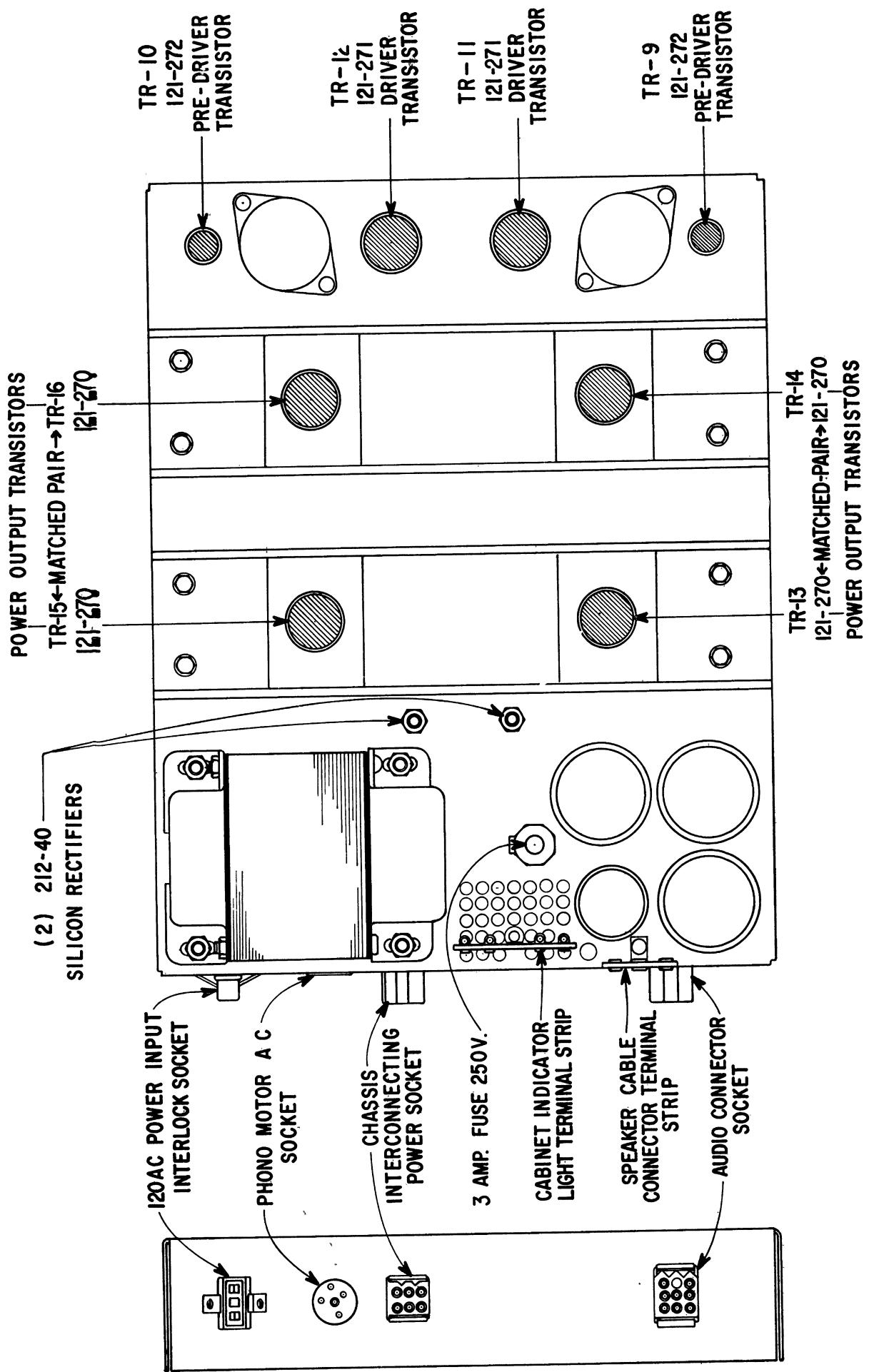


TEST POINTS	
A	FM DETECTOR OUTPUT
B	FM IF OUTPUT
C	2ND AM-FM I.F. INPUT
D	1ST AM-FM I.F. INPUT
E	AM CONVERTER INPUT
F	FM CONVERTER INPUT
G	MX DOUBLER OUTPUT
H	MX DISABLING TEST POINT
I	MX PHASING
J	MX PHASING

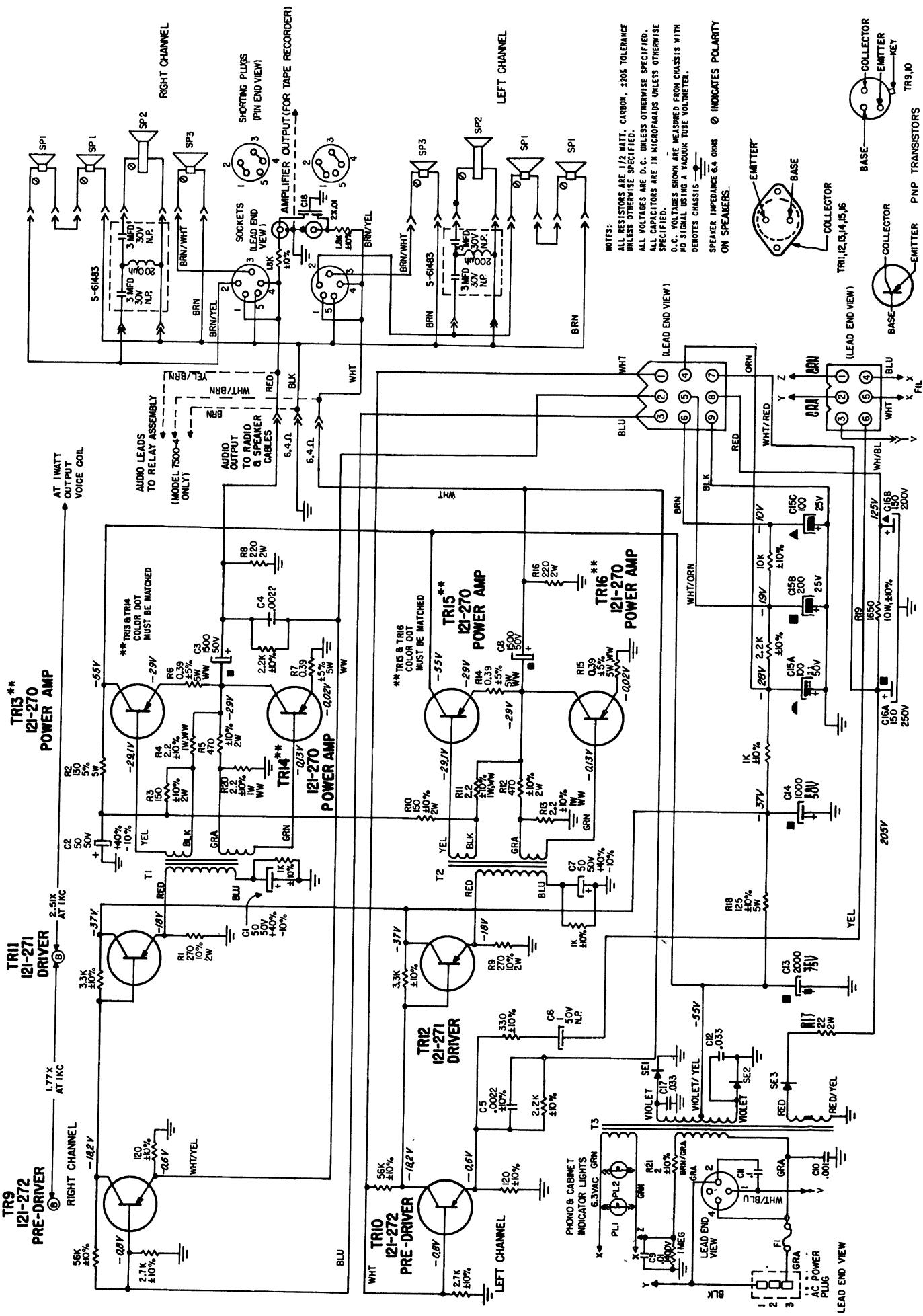








8L T25Z TRANSISTOR LAYOUT FOR MODELS ML2675-3, ML2685-3, AND 7500-3



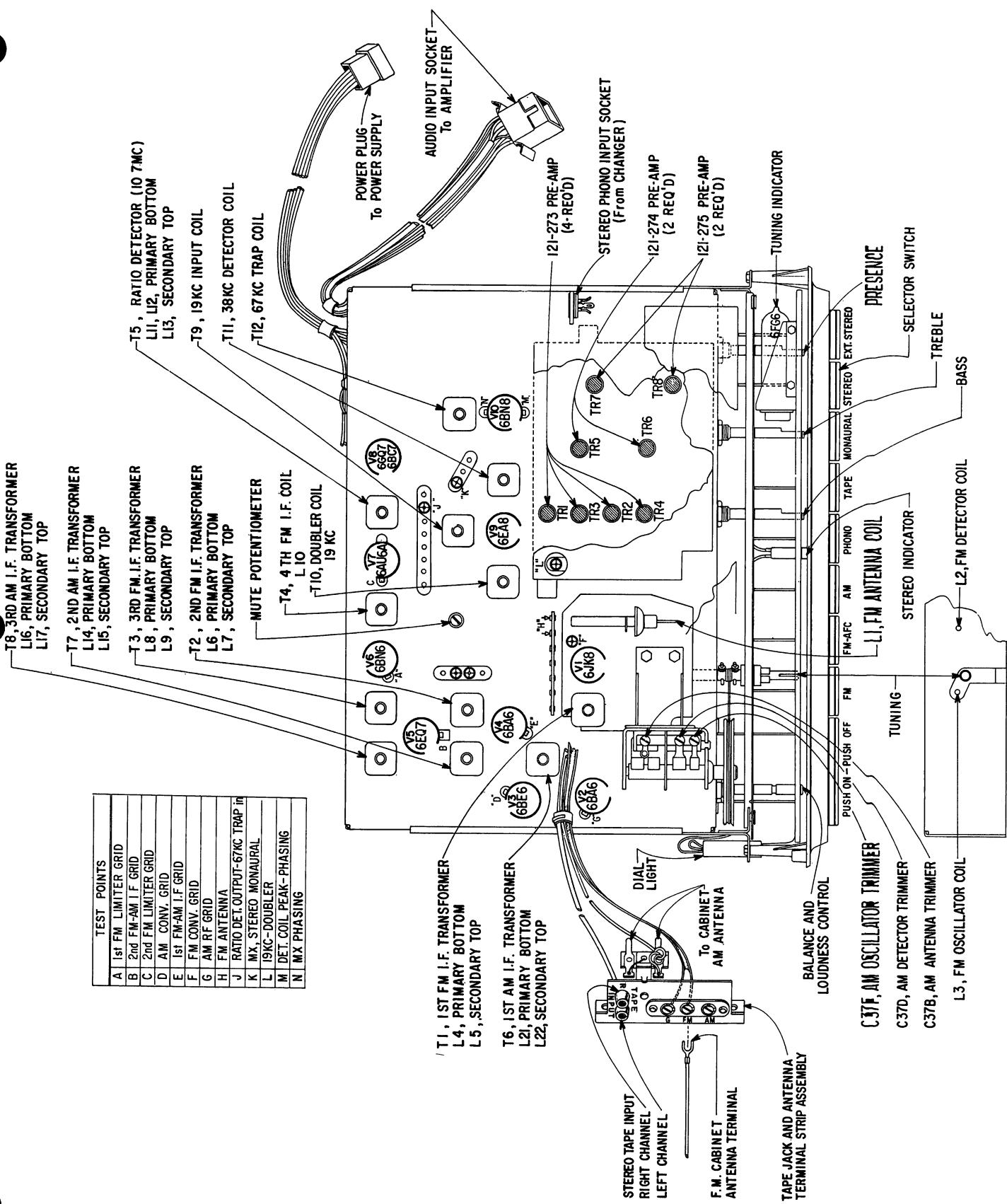
RATIO DET.  
AM DET  
AM AM

RATIO DET.  
AM DET  
6607 OR 6BC7  
V<sub>BA</sub>

1ST IF  
6BA6  
V4

VIA & VIB  
FOR FM TUNER CIRCUIT S-61363  
REFER TO SCHEMATIC

111 325Z SCHEMATIC EOB MODEL S MI 2670-3 MI 2675-3 MI 2685-3 AND 7500-3

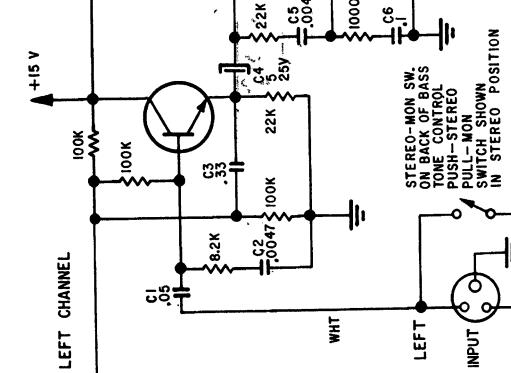


TR-1  
(12I-276)  
AMP

TR-3  
(12I-277)  
PRE DRIVER

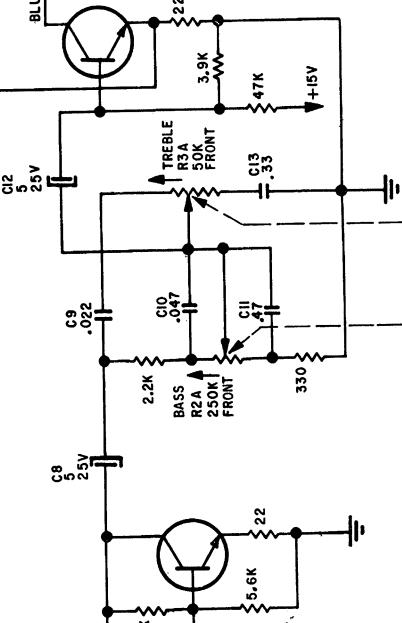
TR-5  
(12I-278)  
DRIVER

TR-7  
(12I-279) \*\*  
POWER AMP



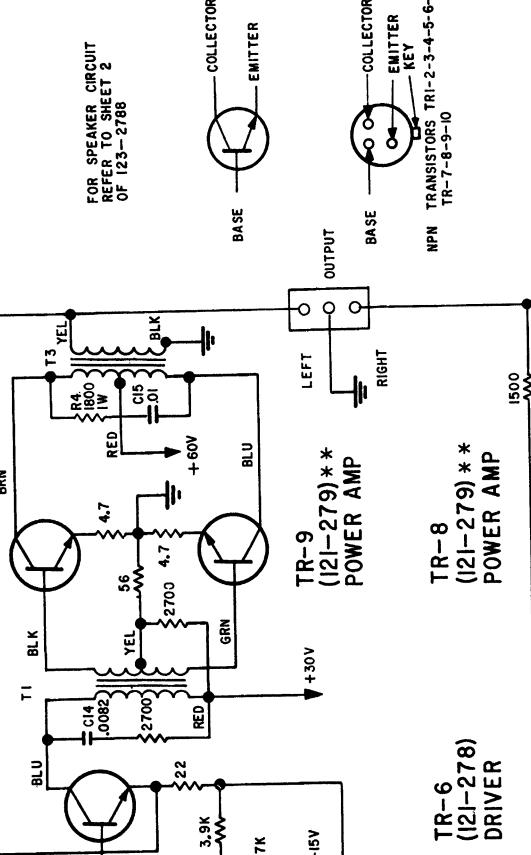
TR-2  
(12I-276)  
AMP

TR-4  
(12I-277)  
PRE DRIVER



STEREO - MON. SW.  
ON BACK OF BASS  
TONE CONTROL  
PULL - MON. SW.  
IN STEREO POSITION

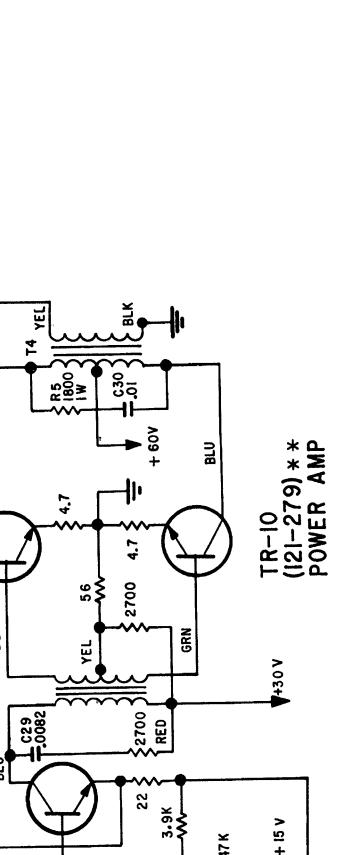
INPUT  
LEFT  
RIGHT  
RED



TR-6  
(12I-278)  
DRIVER

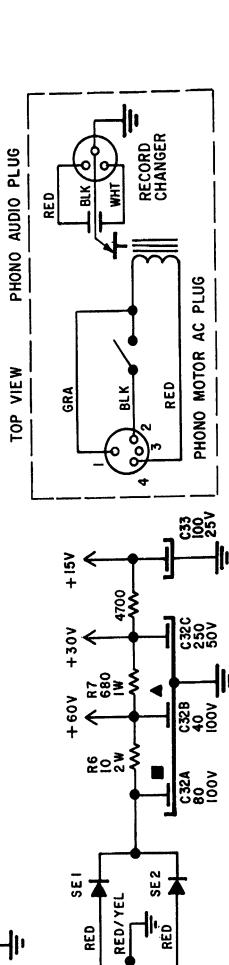
TR-9  
(12I-279) \*\*  
POWER AMP

NPN TRANSISTORS  
TR-2-3-4-5-6-  
KEY



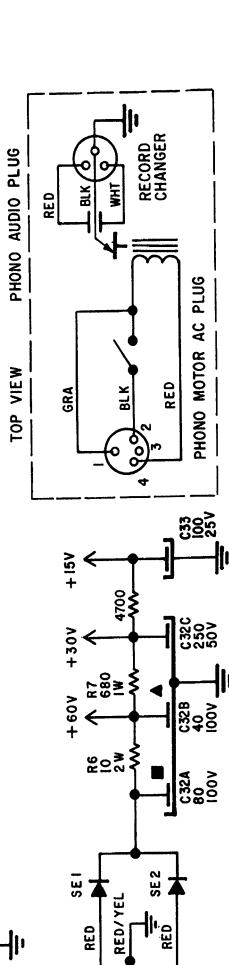
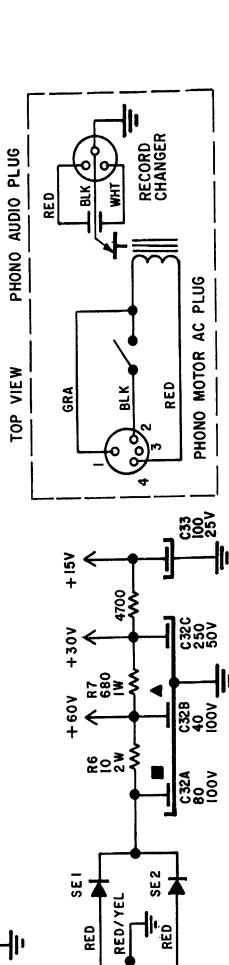
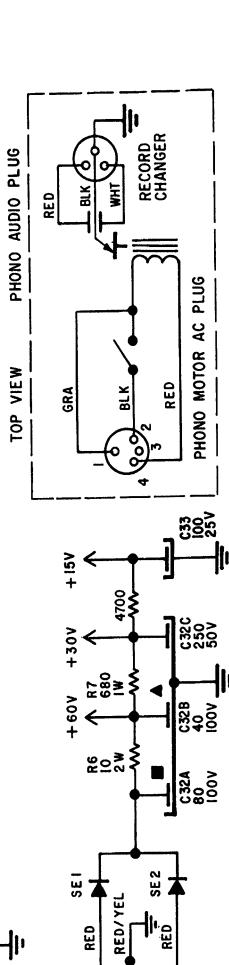
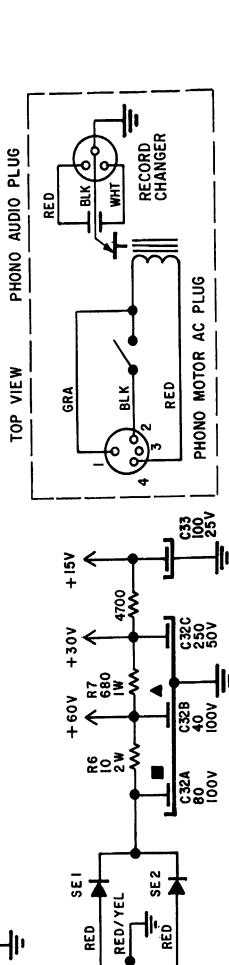
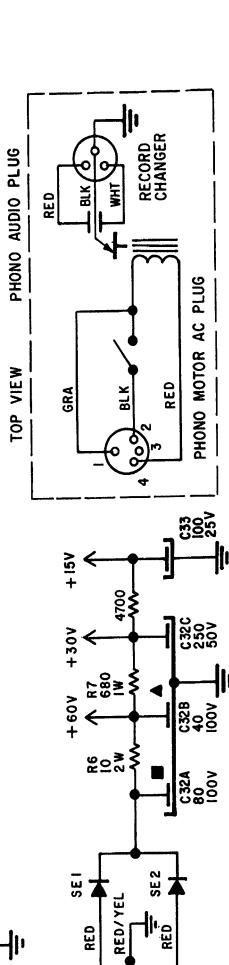
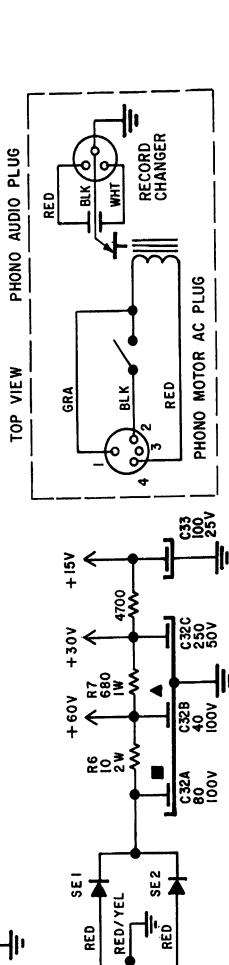
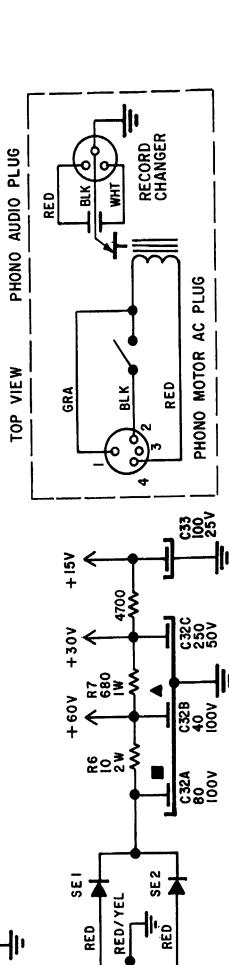
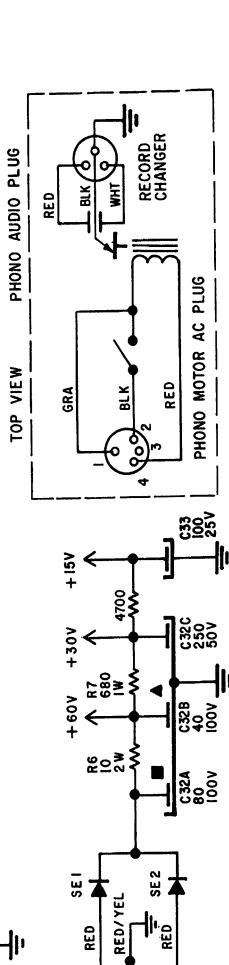
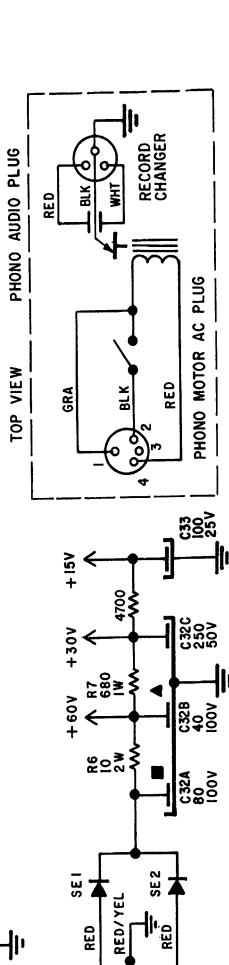
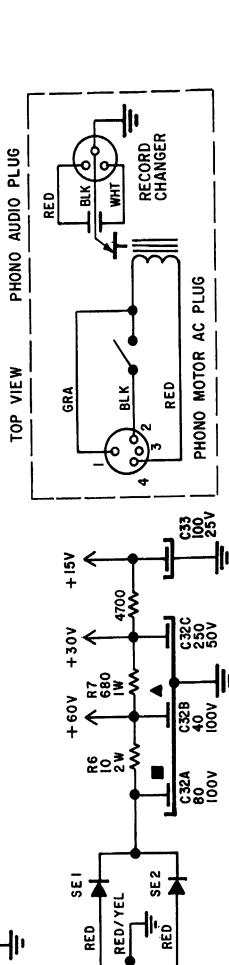
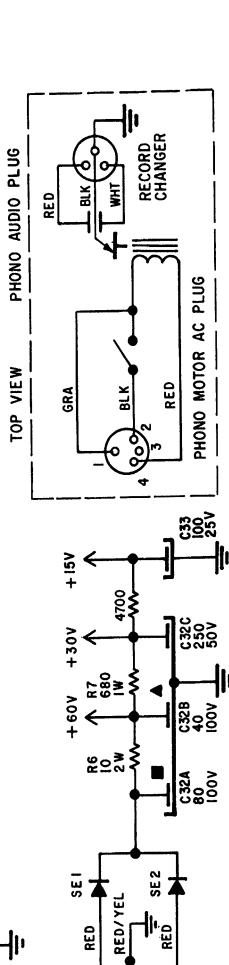
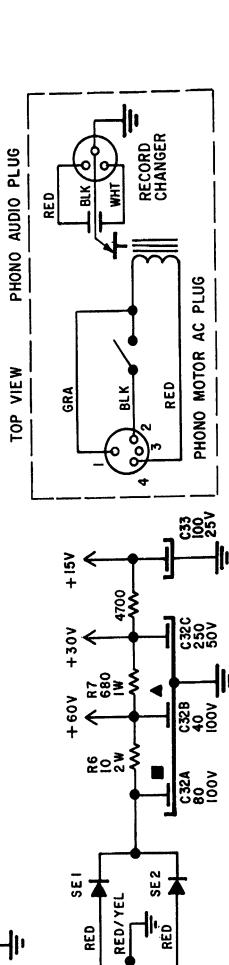
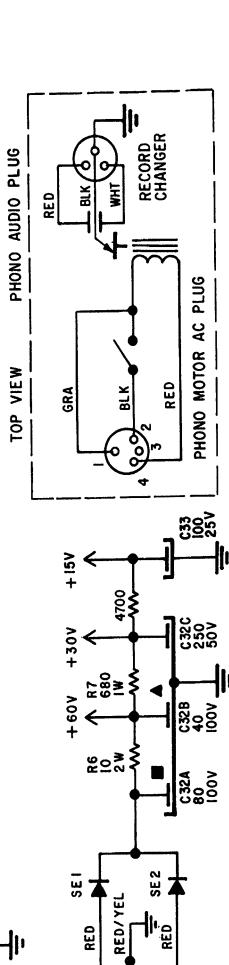
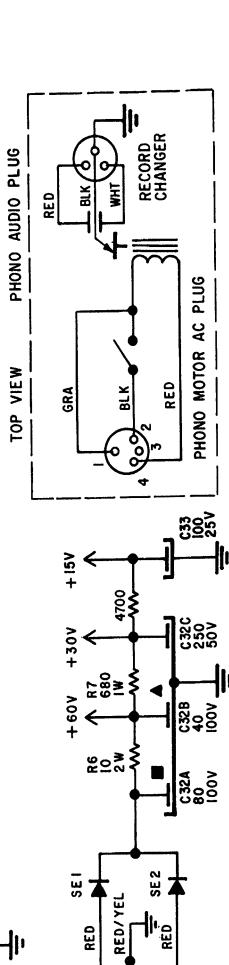
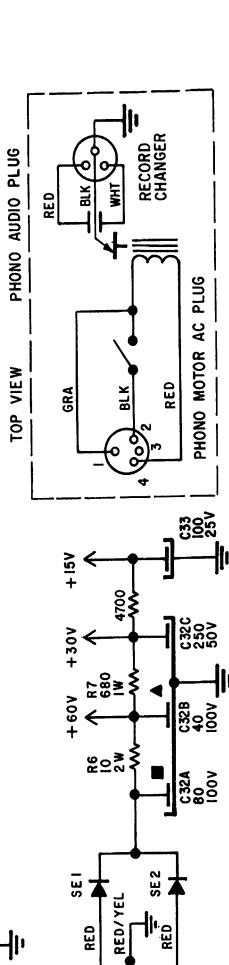
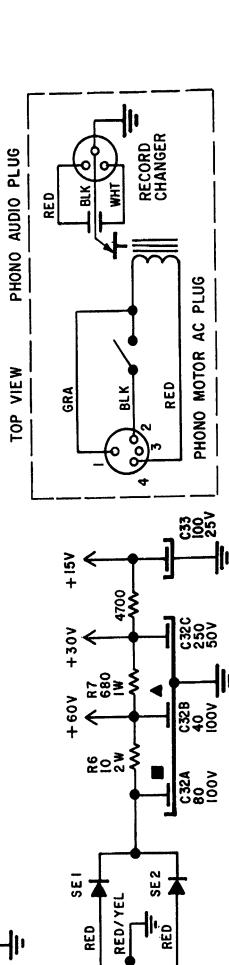
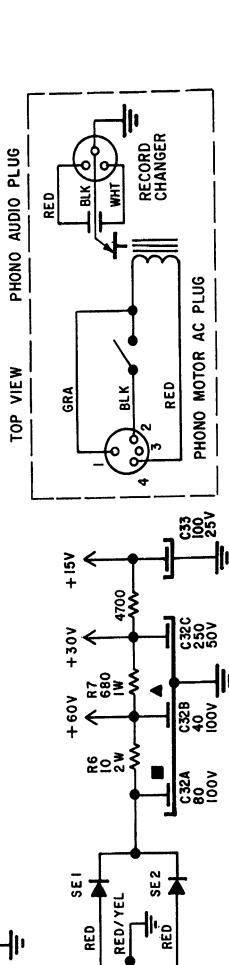
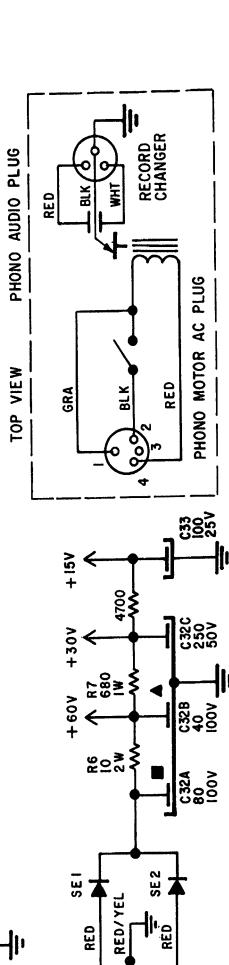
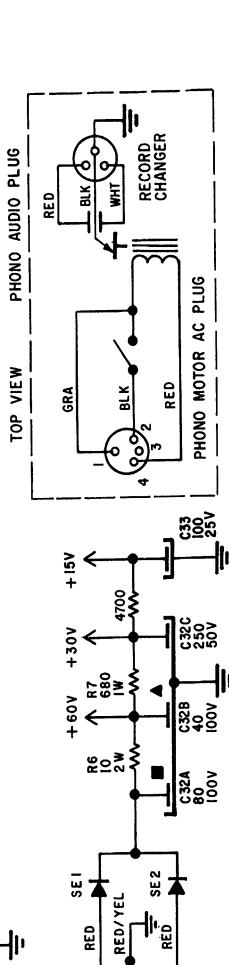
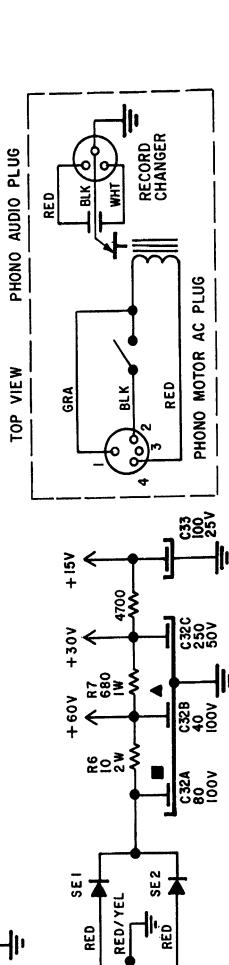
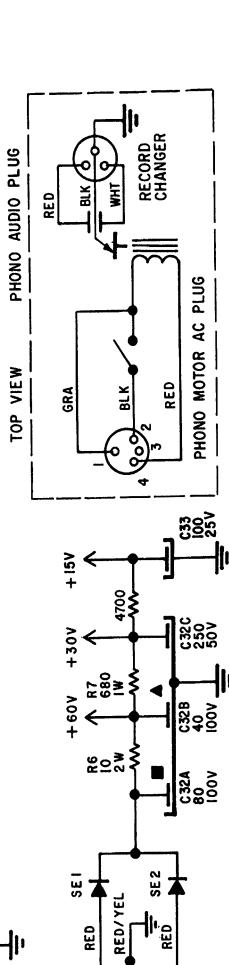
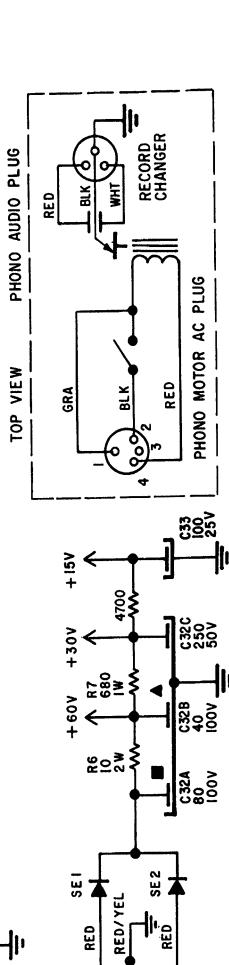
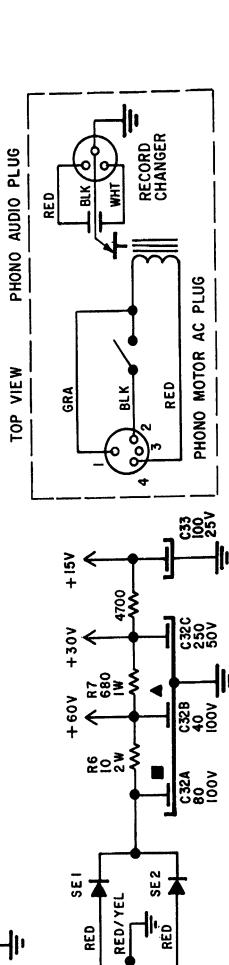
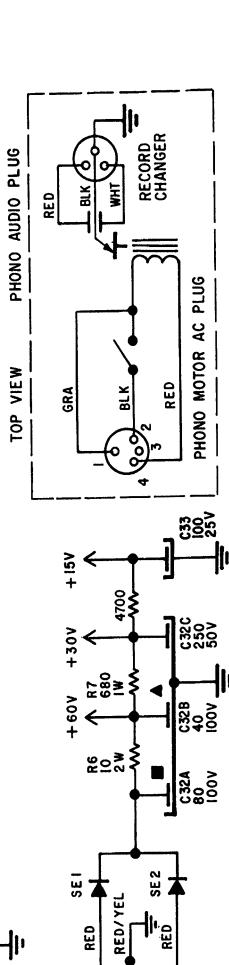
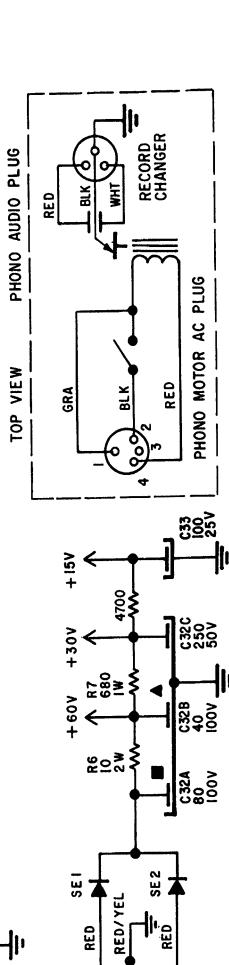
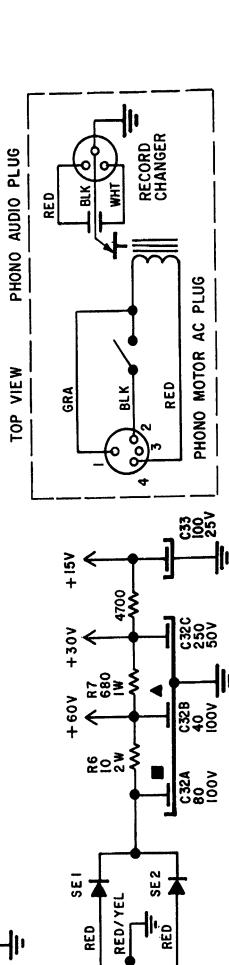
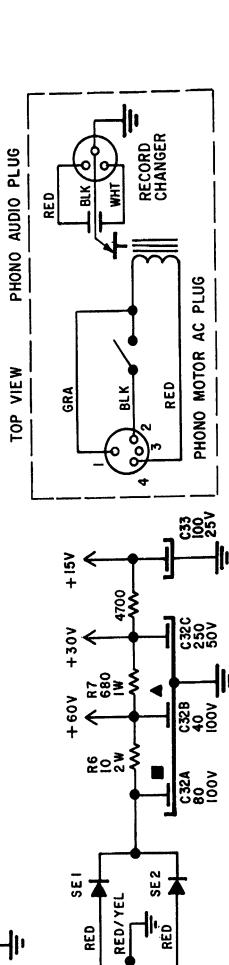
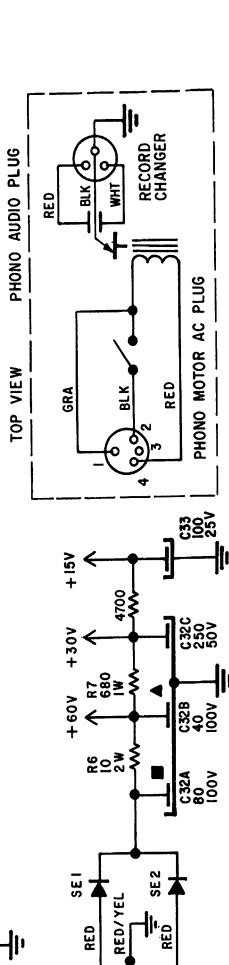
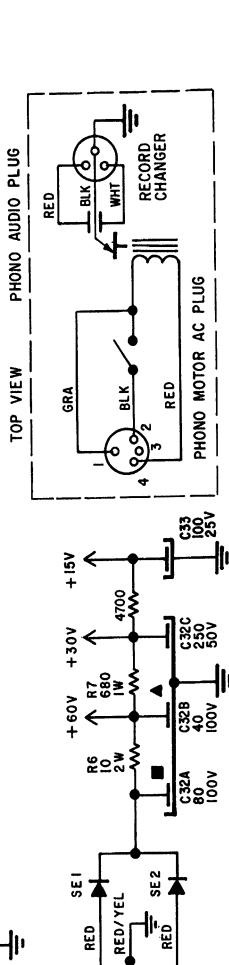
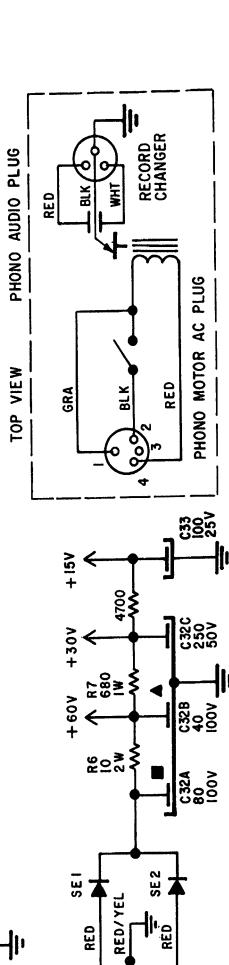
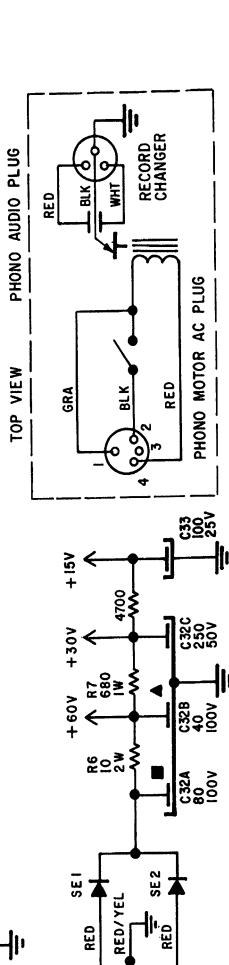
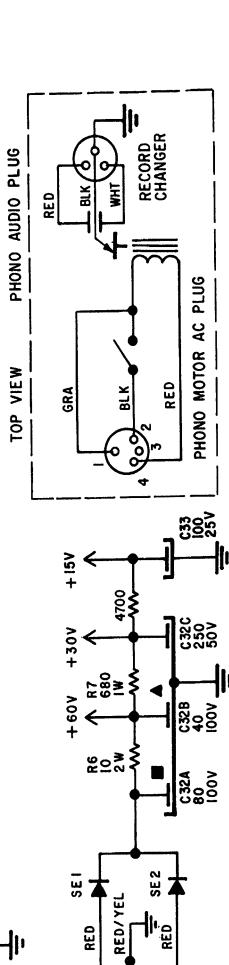
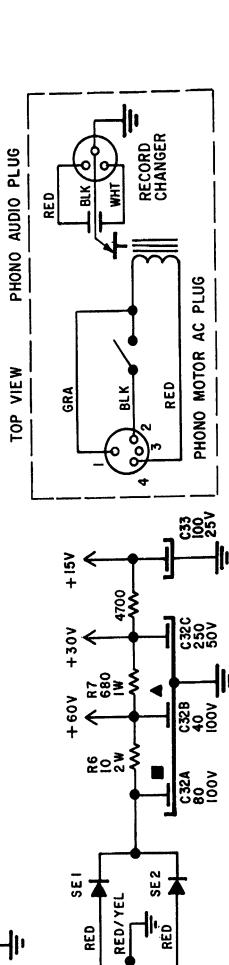
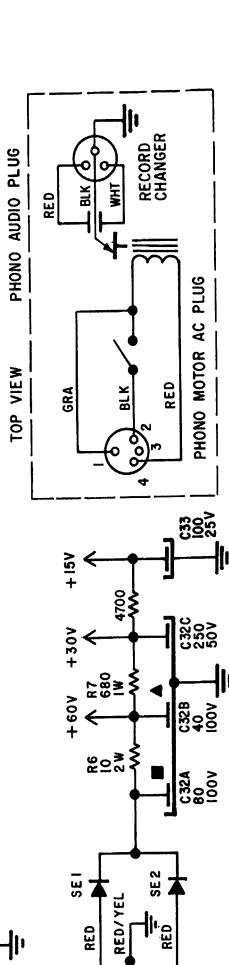
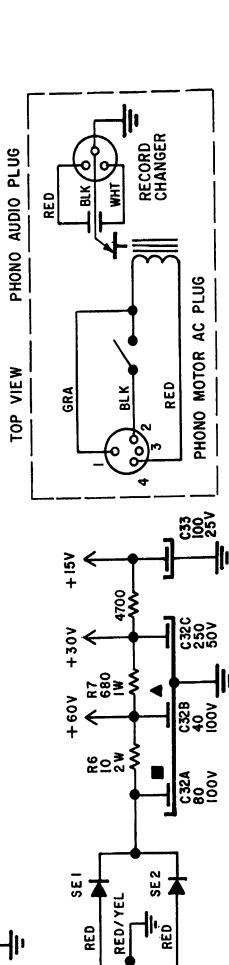
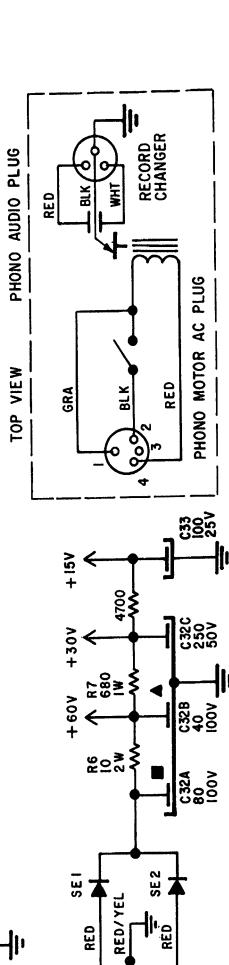
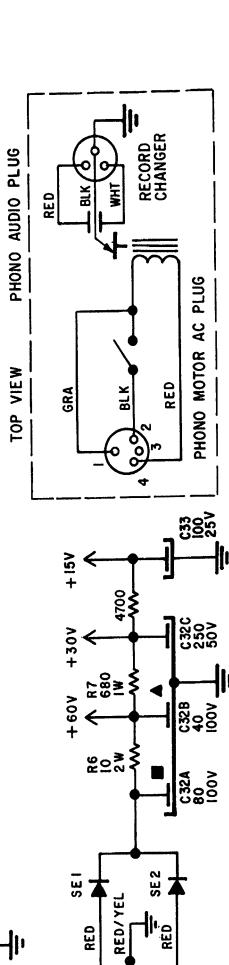
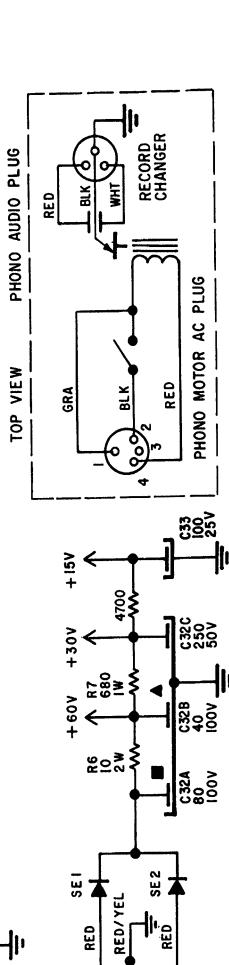
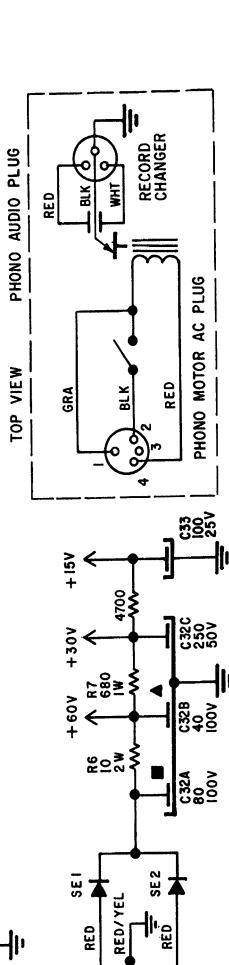
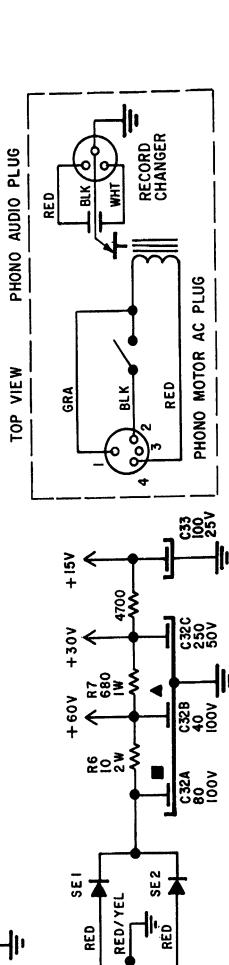
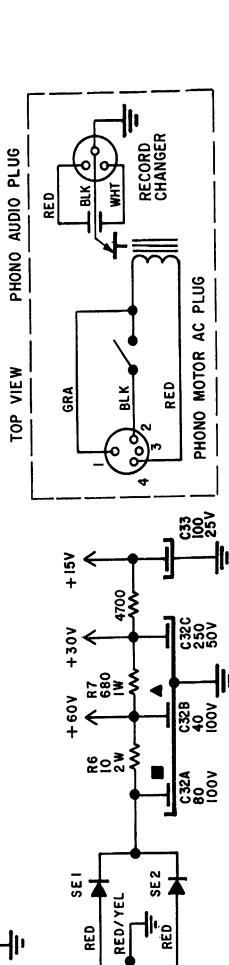
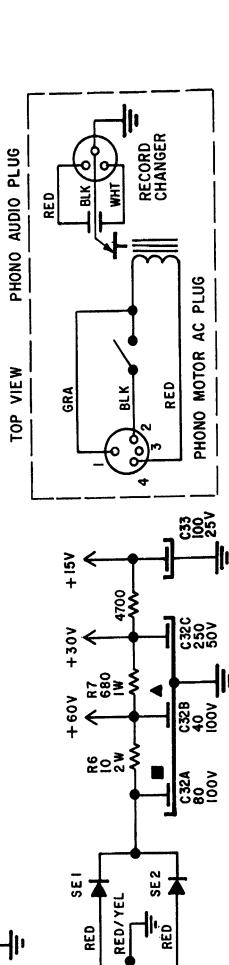
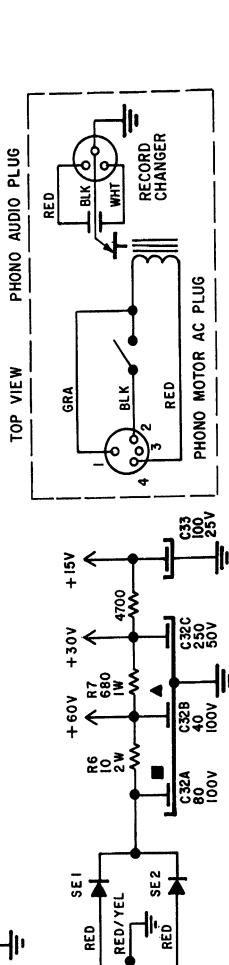
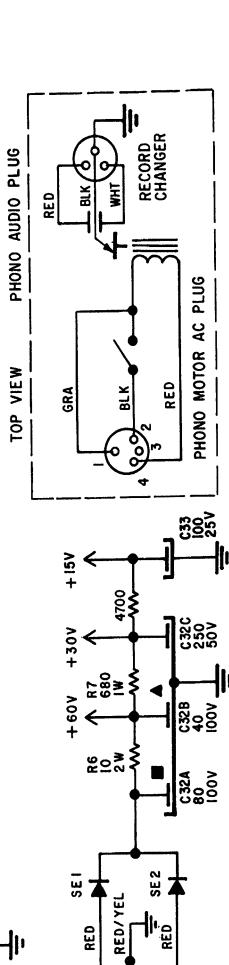
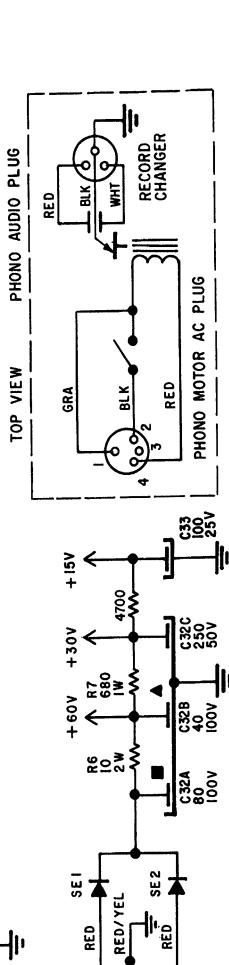
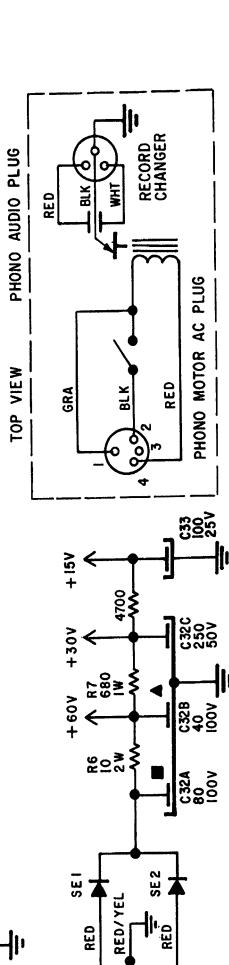
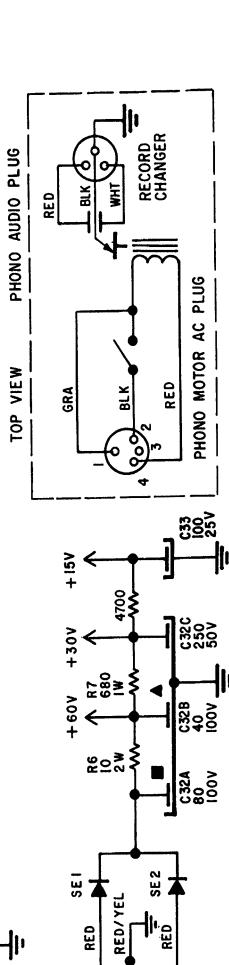
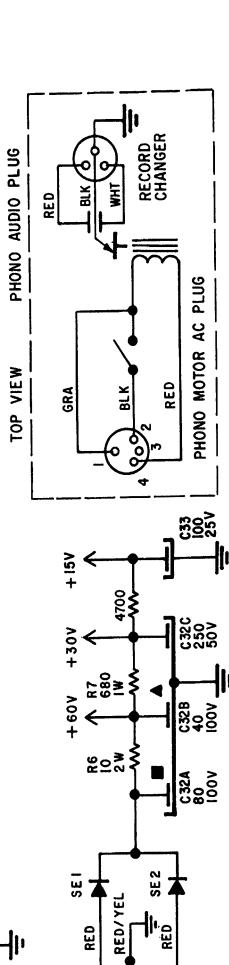
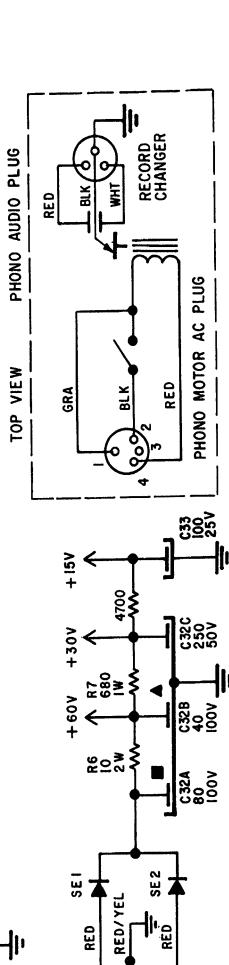
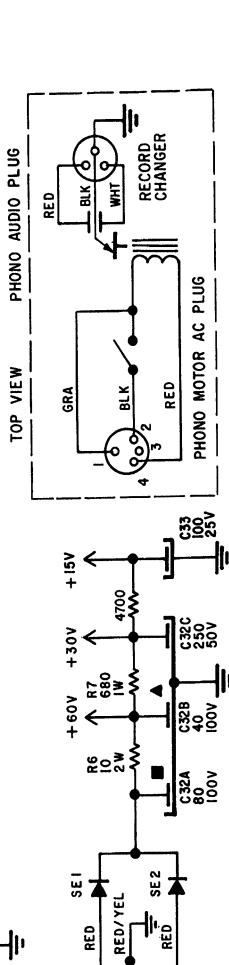
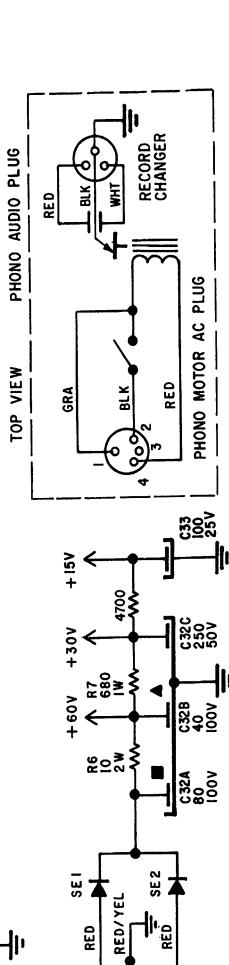
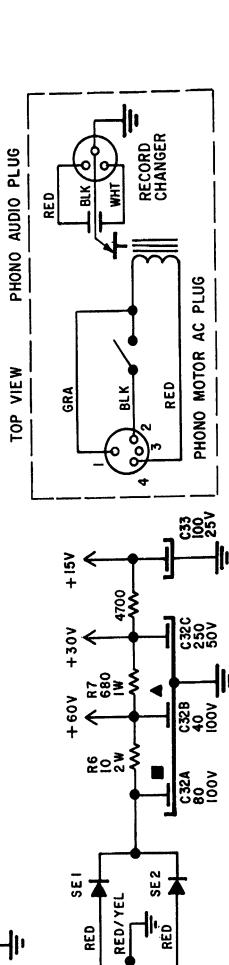
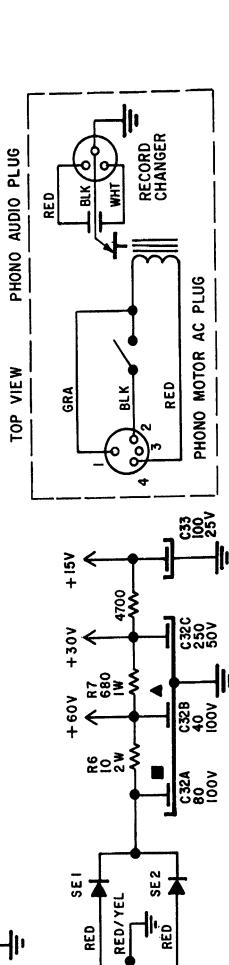
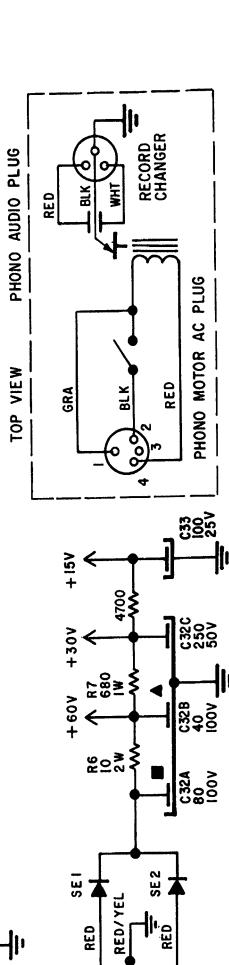
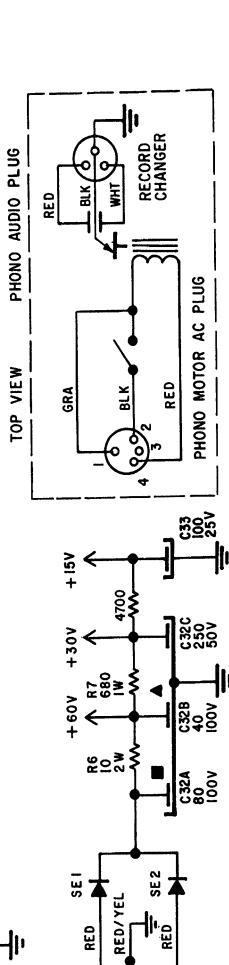
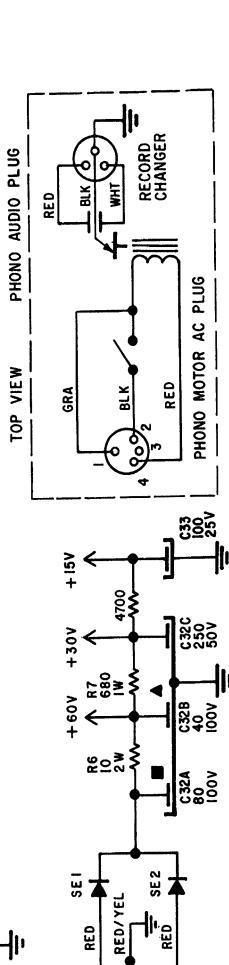
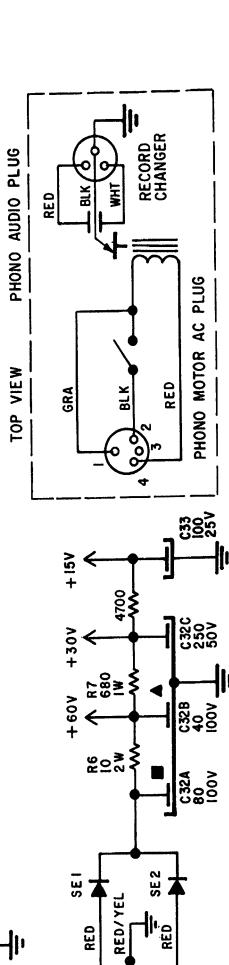
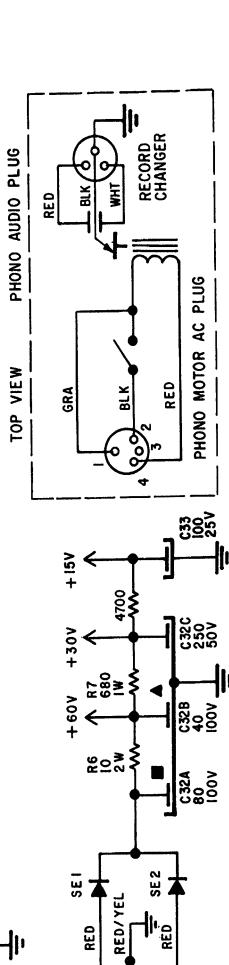
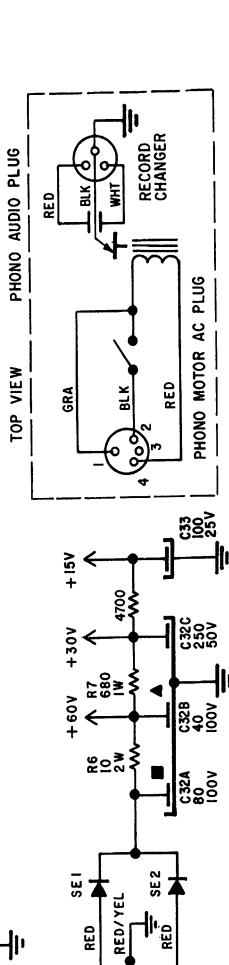
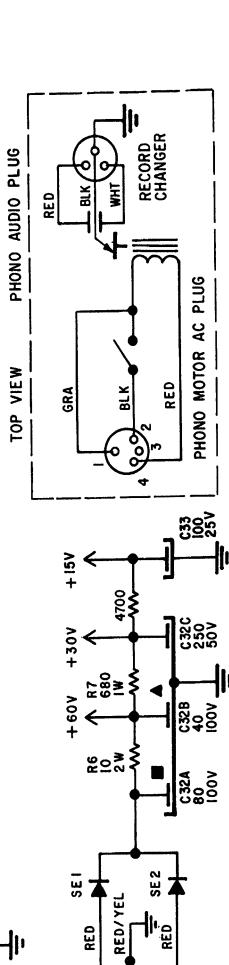
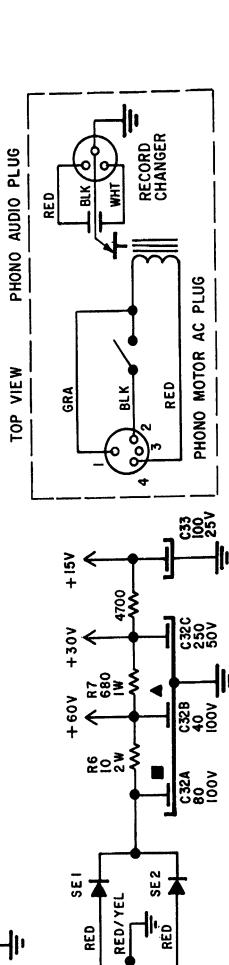
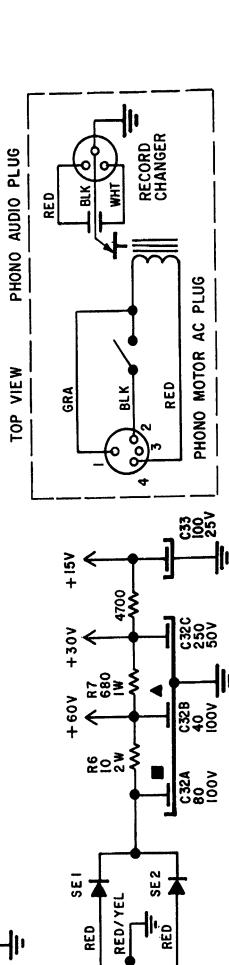
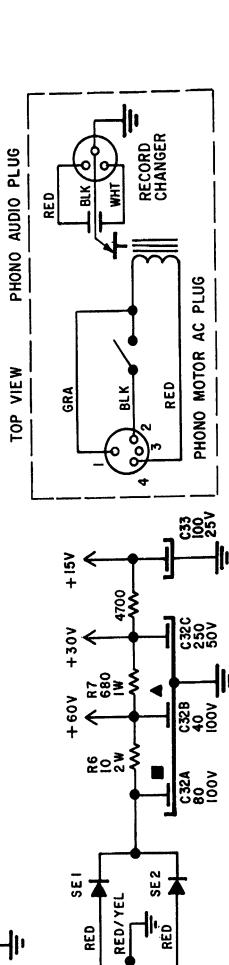
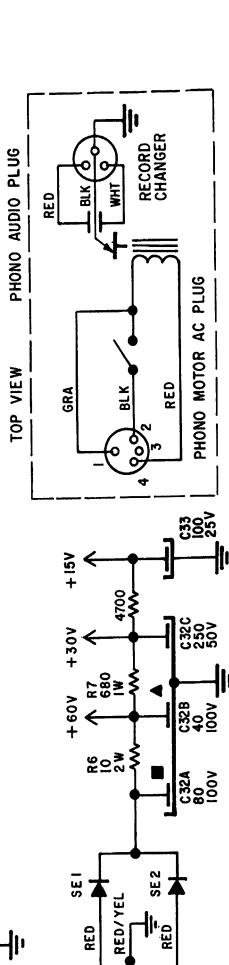
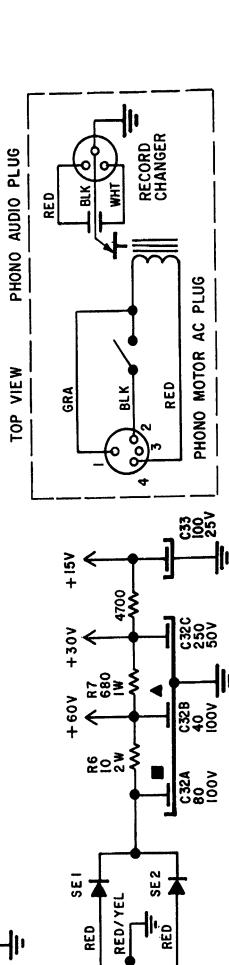
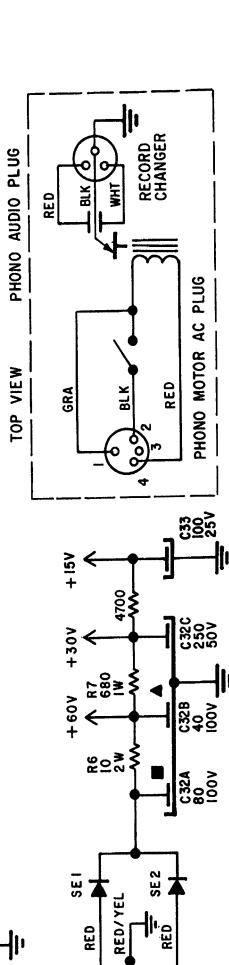
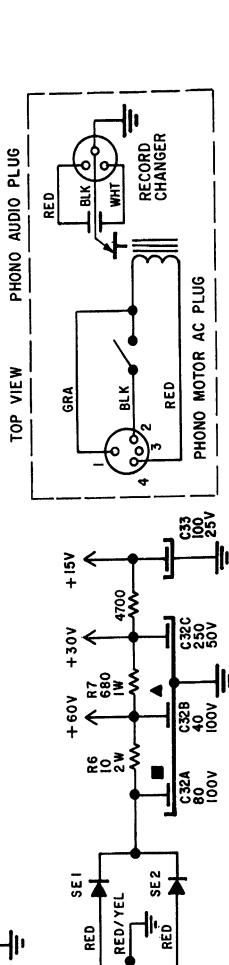
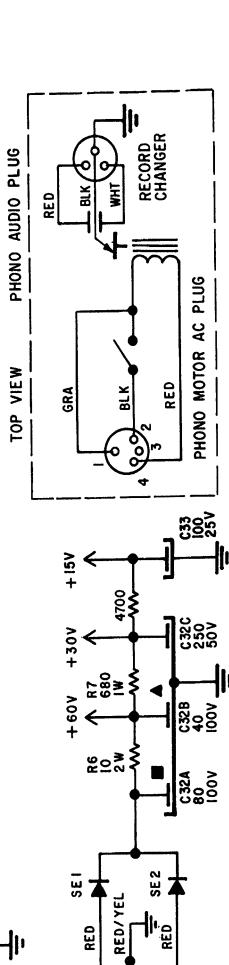
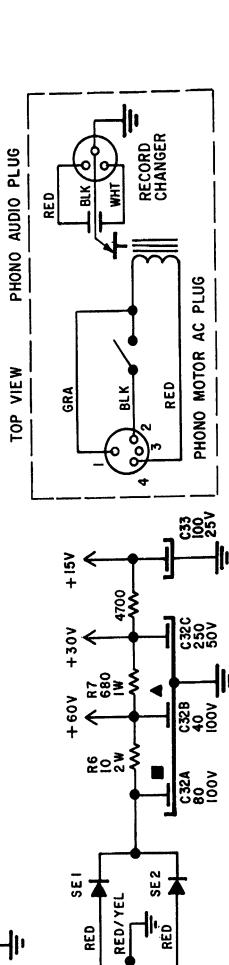
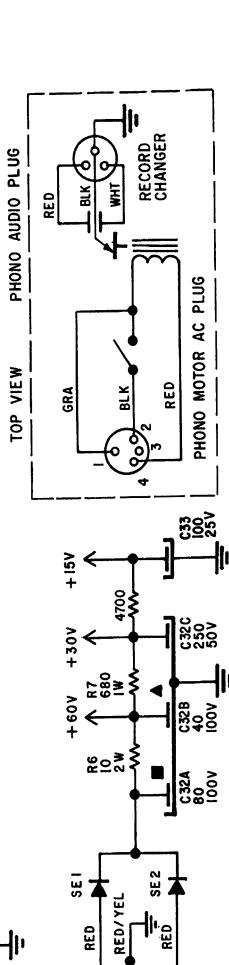
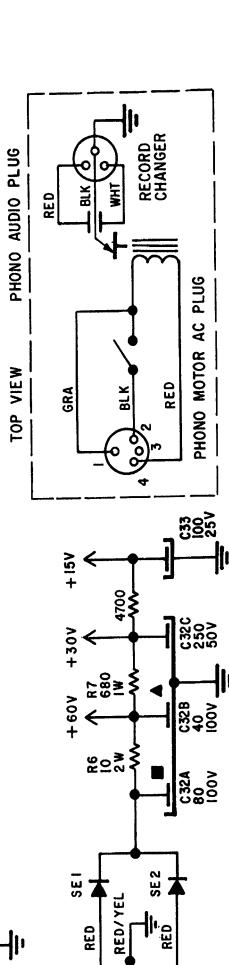
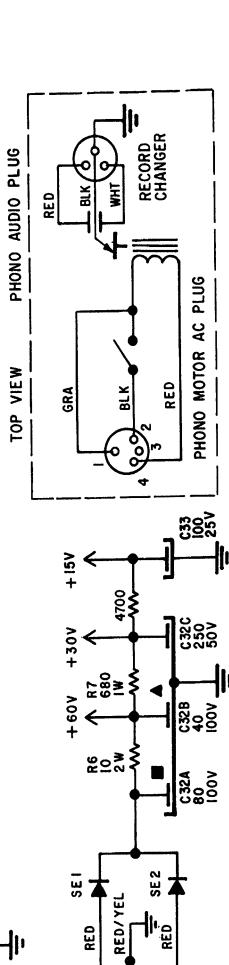
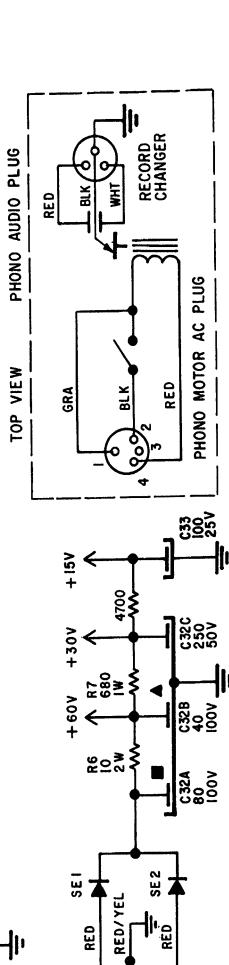
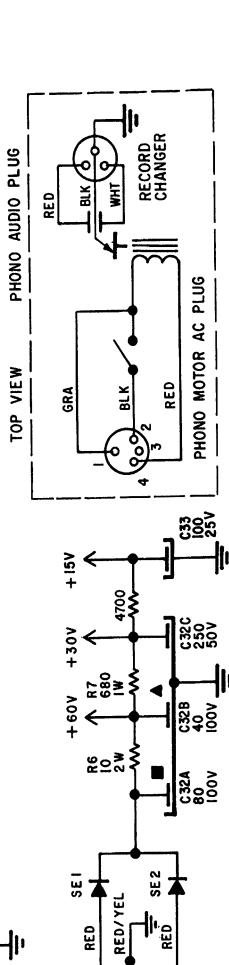
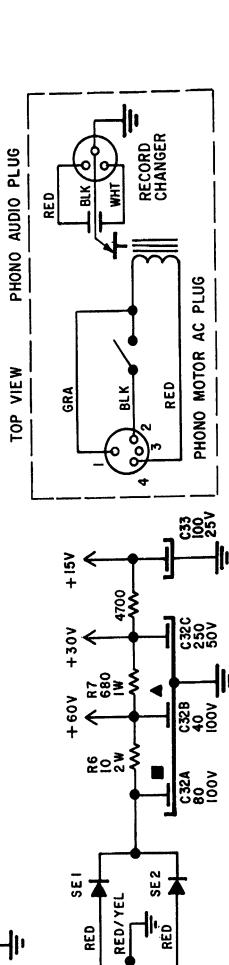
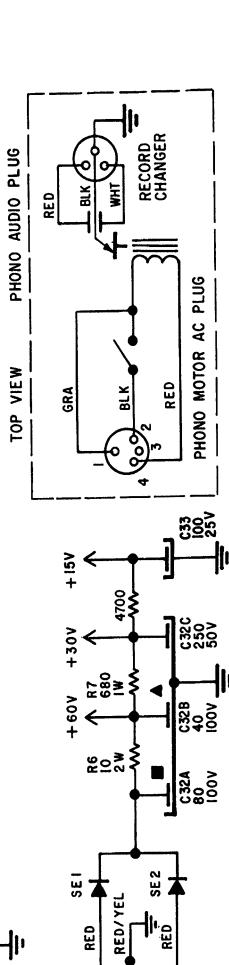
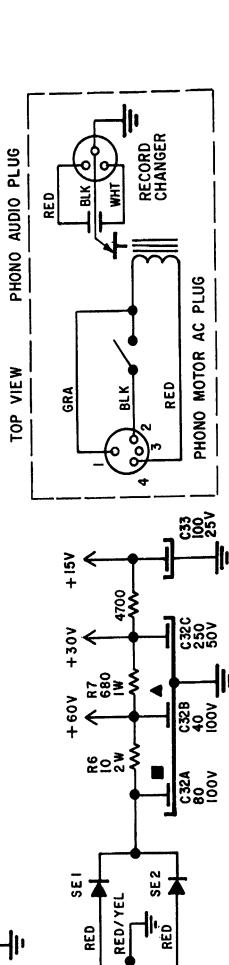
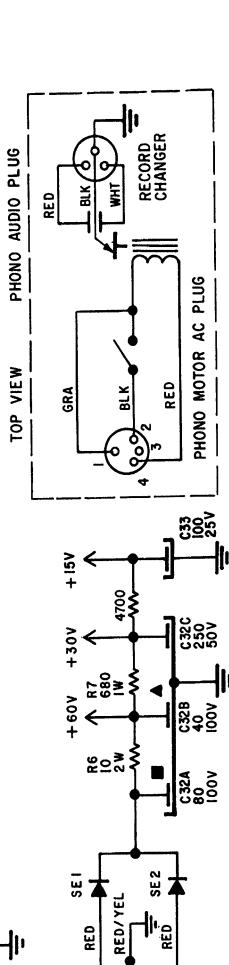
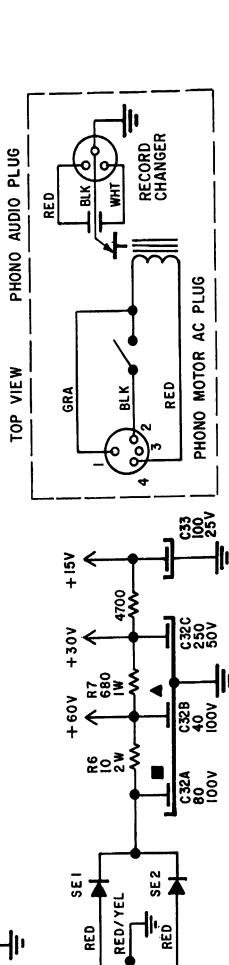
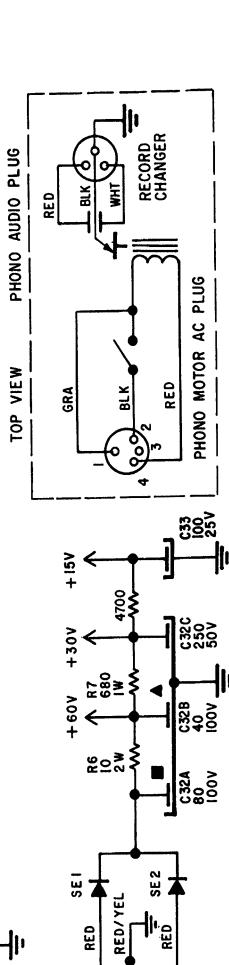
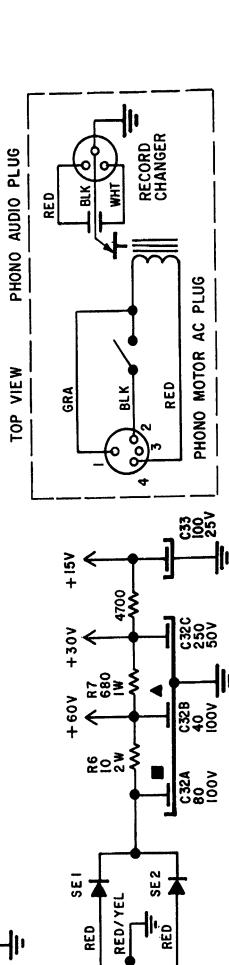
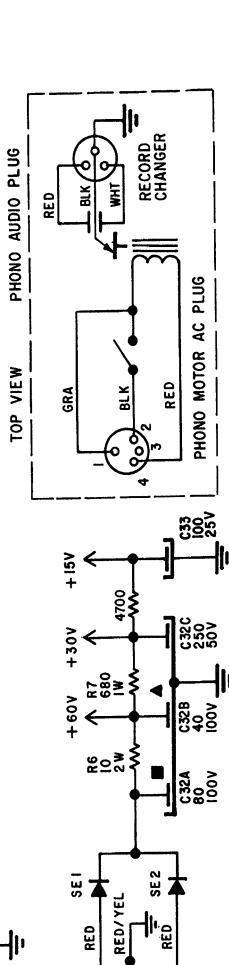
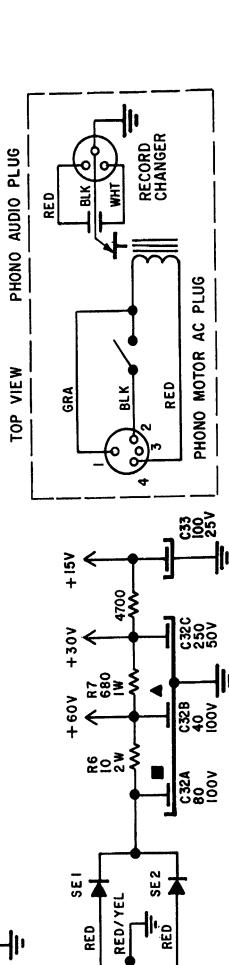
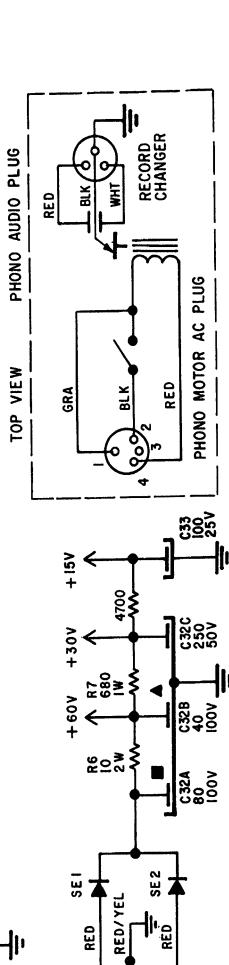
TR-8  
(12I-279) \*\*  
POWER AMP

NPN TRANSISTORS  
TR-7-8-9-10



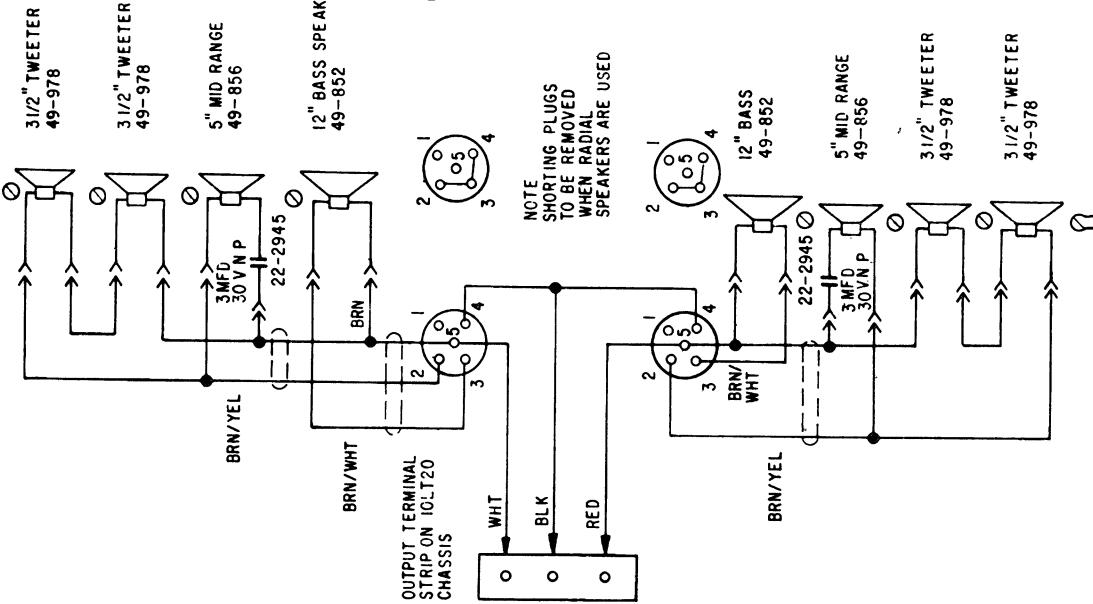
TR-10  
(12I-279) \*\*  
POWER AMP

NPN TRANSISTORS  
TR-2-3-4-5-6-  
KEY



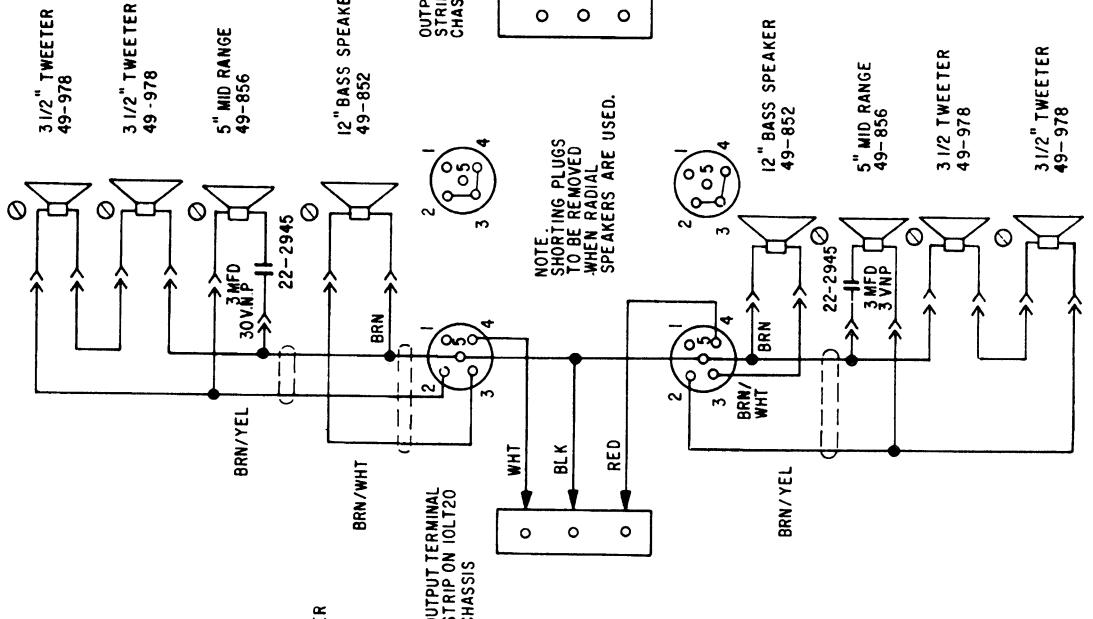
**SPEAKER HOOKUP FOR MODELS  
ML2608-3, ML2610-3  
(S-56029 SPEAKER CABLE ASSEMBLY)**

**SPEAKER HOOKUP FOR MODELS  
ML2636-3  
(S-56055 SPEAKER CABLE ASSEMBLY)**

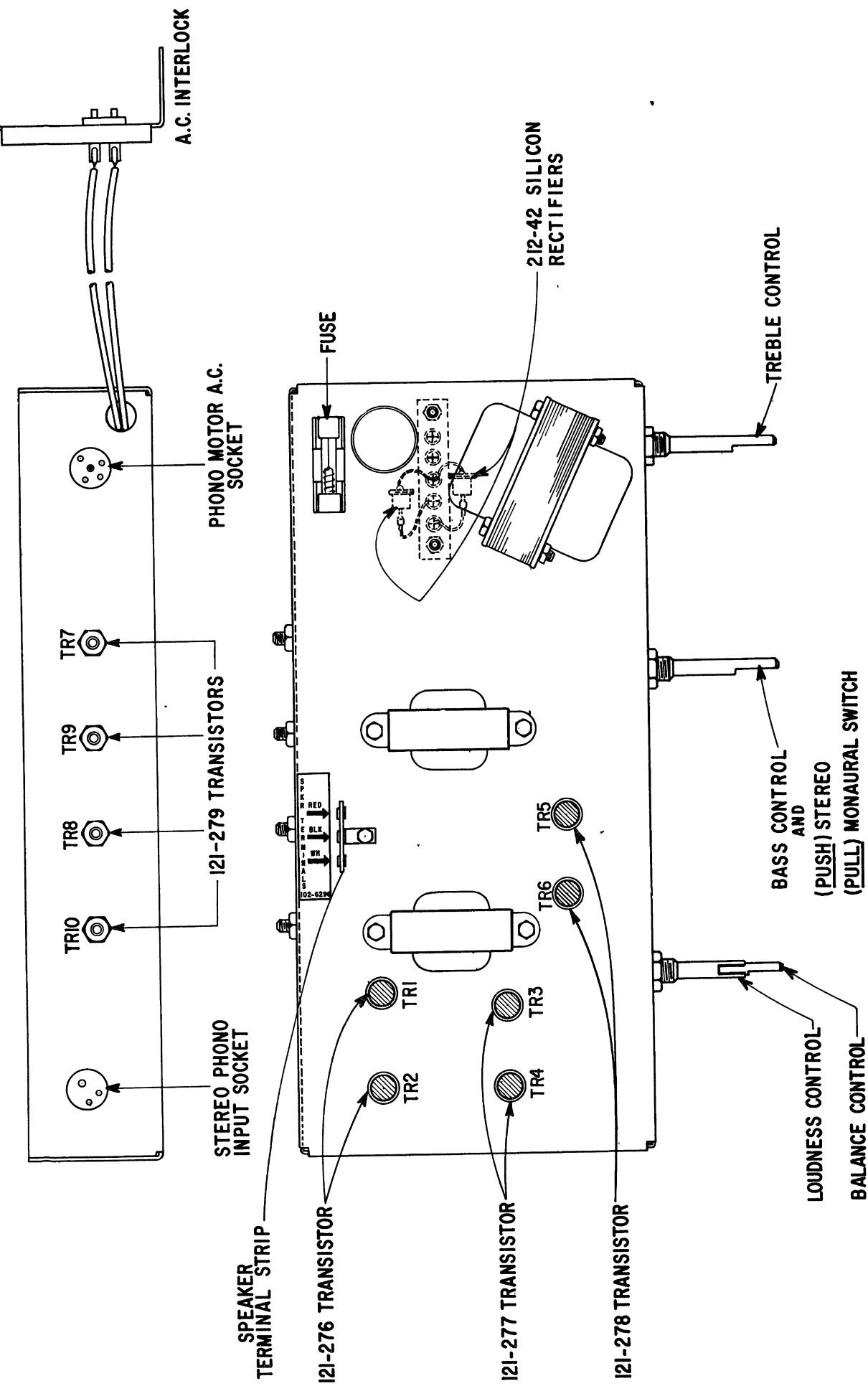


63

**SPEAKER HOOKUP FOR  
MODEL 7200-3  
(S-64957 SPEAKER CABLE ASSEMBLY)**

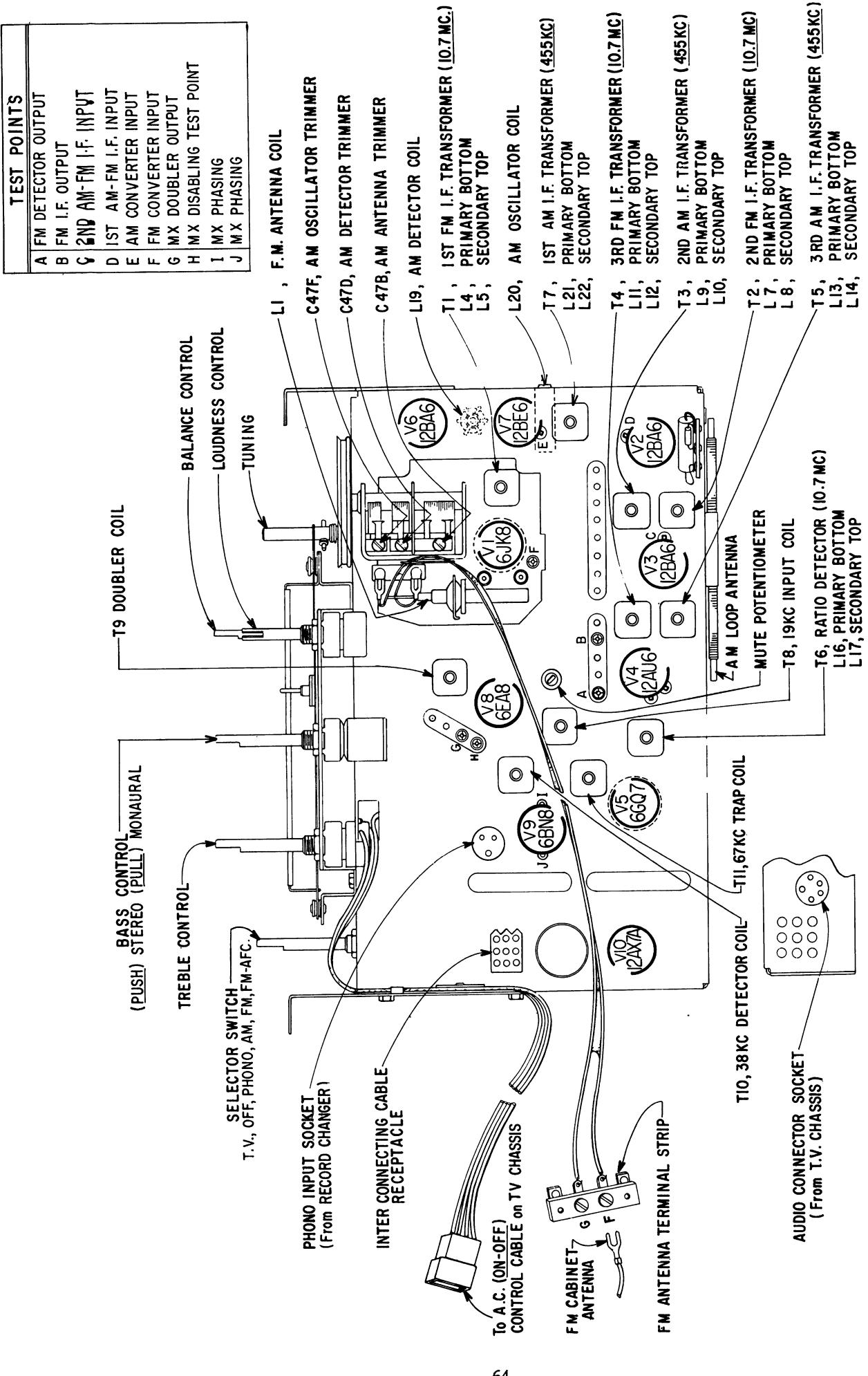


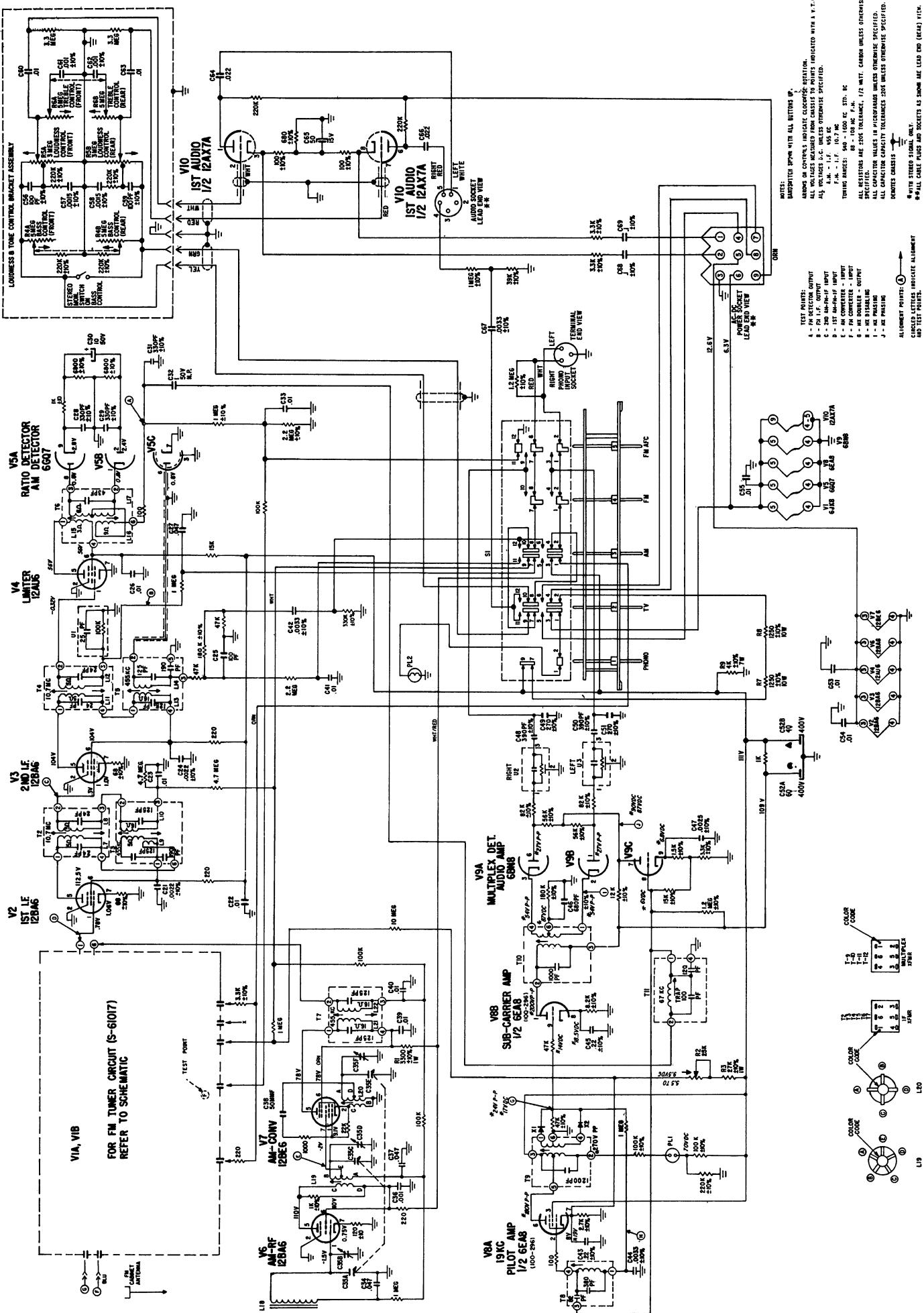
NOTE:  INDICATES POLARIZATION DOT ON SPEAKERS



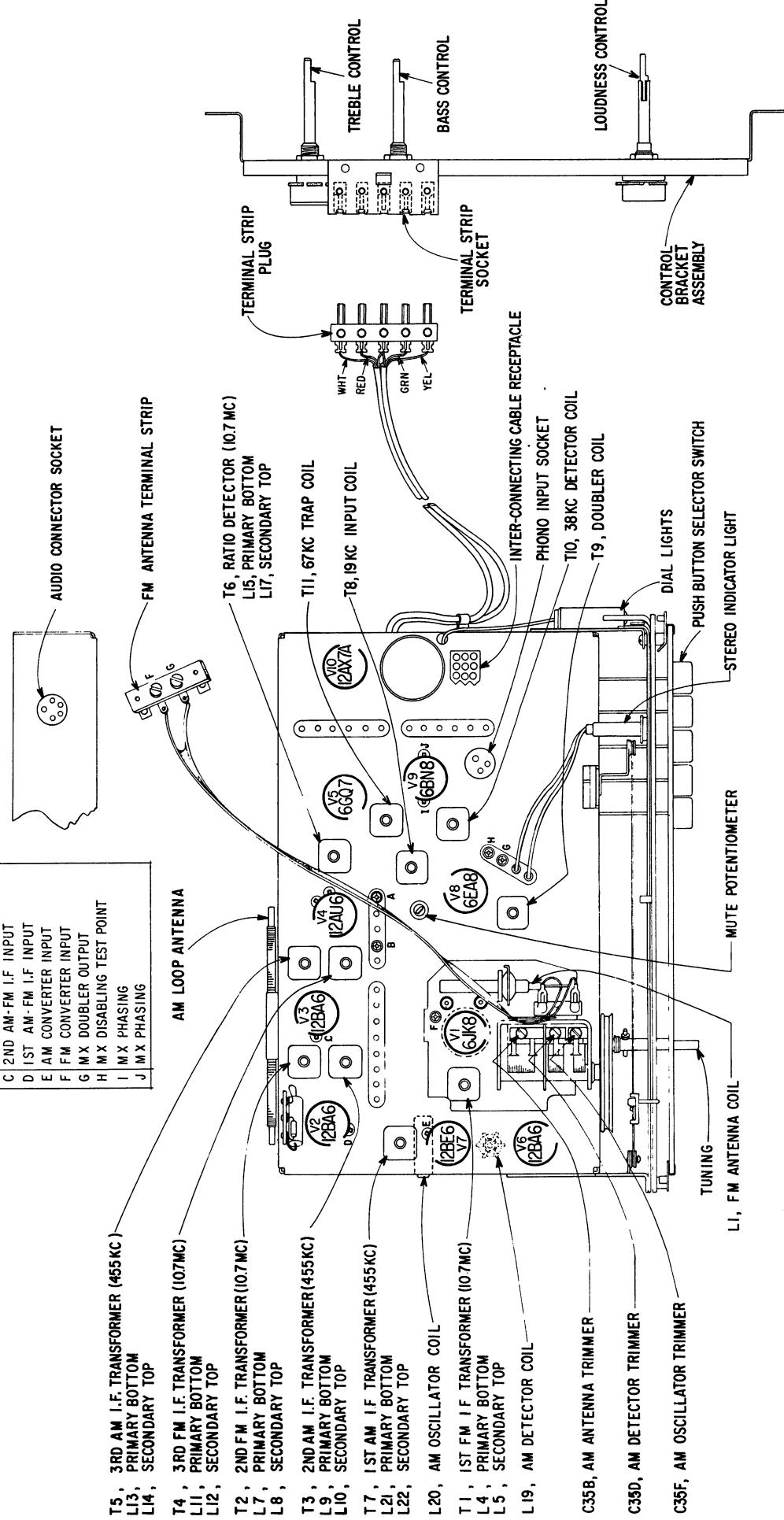
10L T20 TRANSISTOR LAYOUT FOR MODELS ML2608-3, ML2610-3, ML2636-3 AND 7200-3



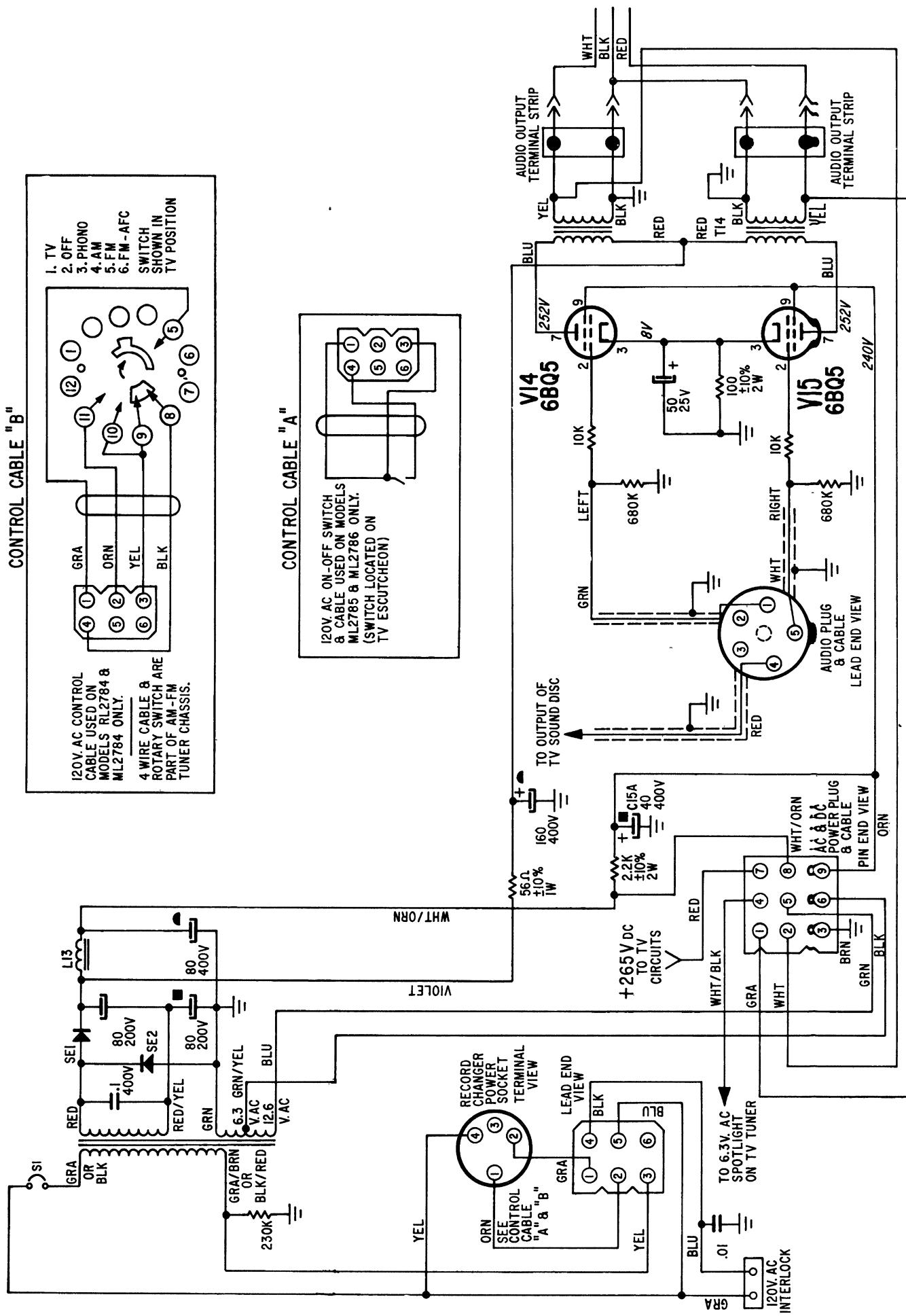


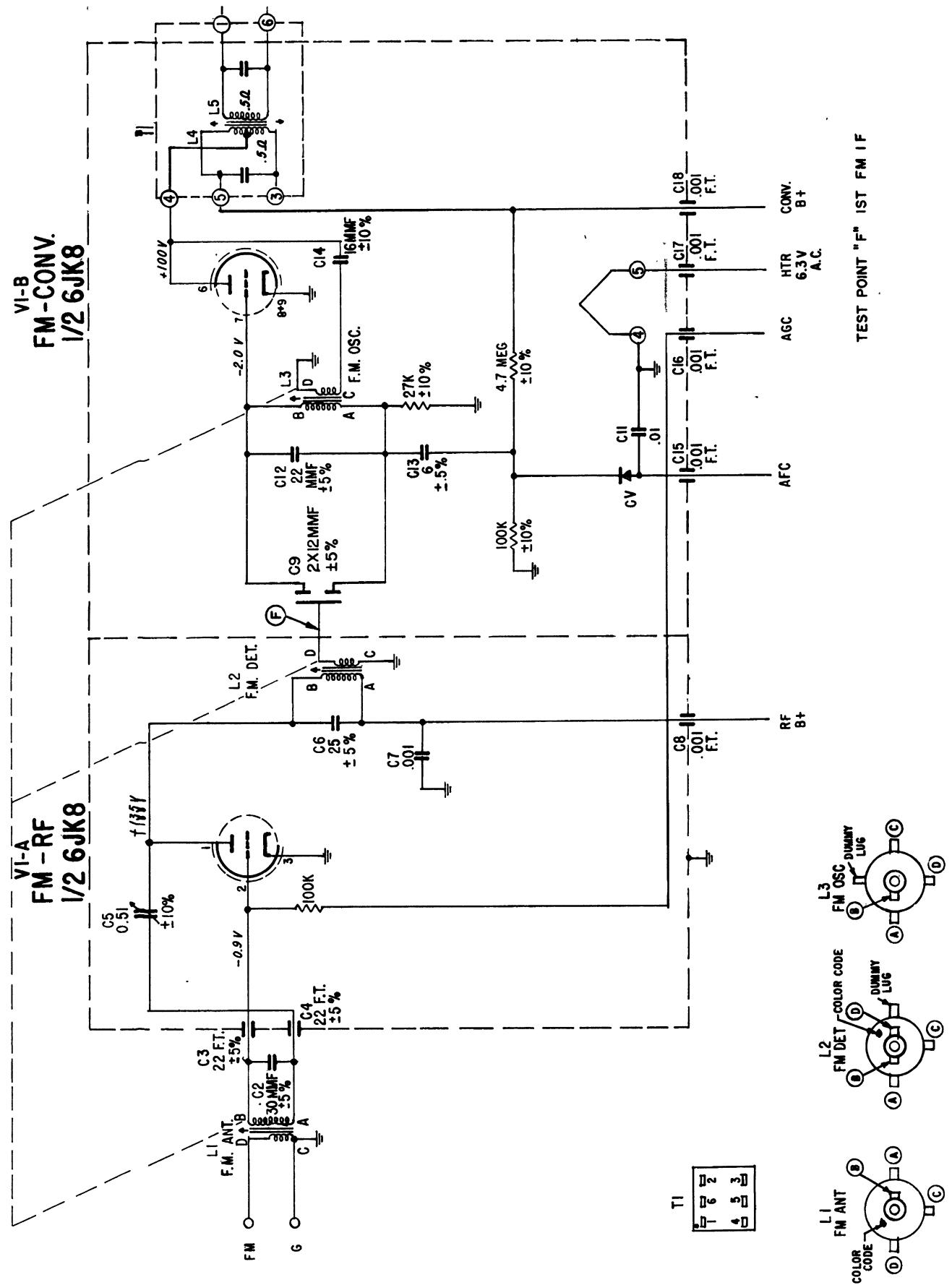


TEST POINTS	
A	FM DETECTOR OUTPUT
B	FM I/F OUTPUT
C	2ND AM-FM I/F INPUT
D	1ST AM-FM I/F INPUT
E	AM CONVERTER INPUT
F	FM CONVERTER INPUT
G	FM DOUBLER OUTPUT
H	MAX DISABLING TEST POINT
I	NX PHASING
J	MX PHASING



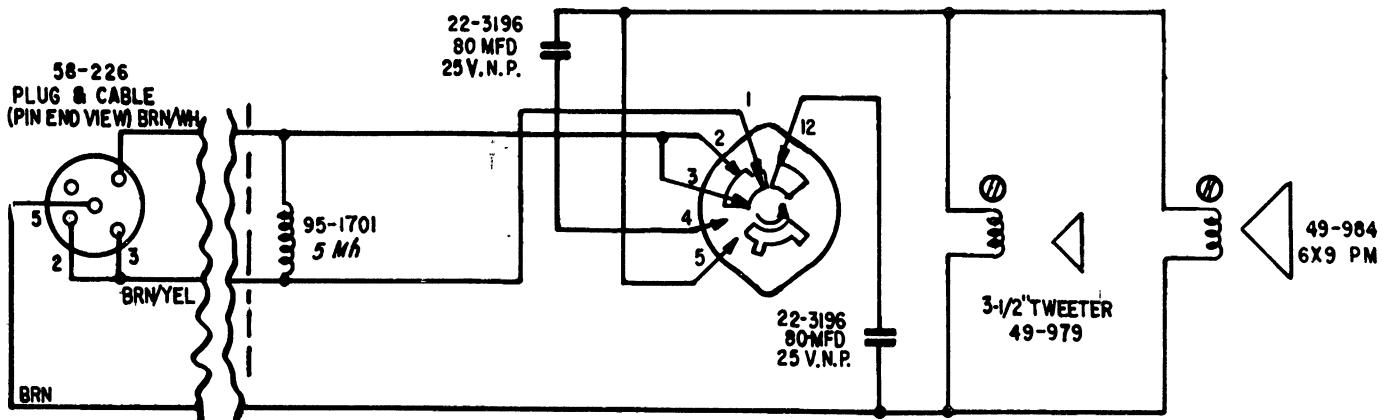
## CONTROL CABLE "B"





SHOWN IN FIRST POSITION

1ST—OFF  
2ND—RADIAL SPEAKER (ONLY)  
3RD—MASTER & RADIAL SPEAKER

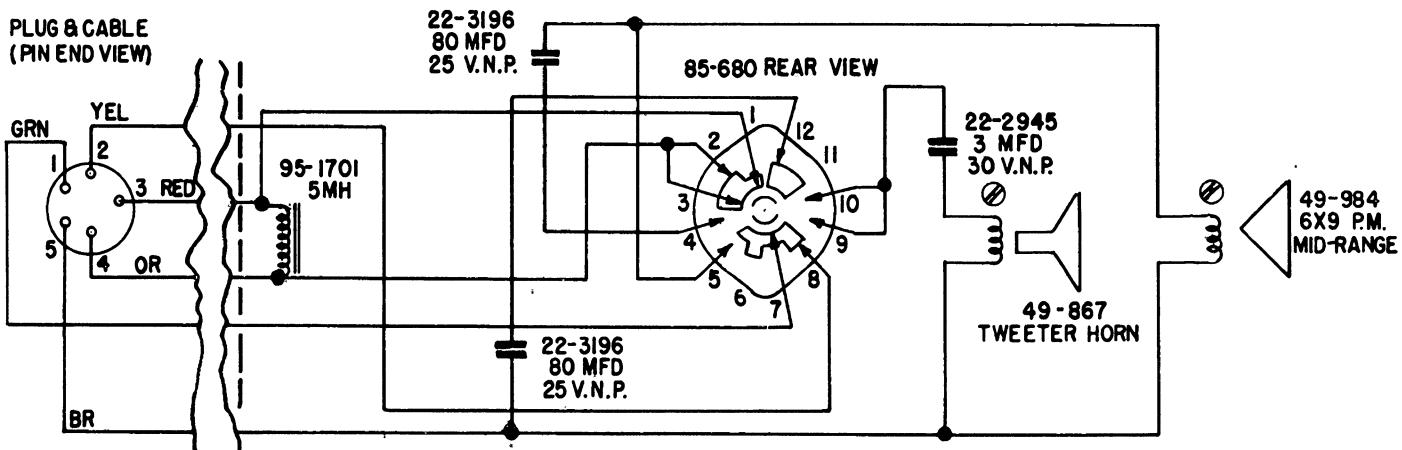


Ⓐ INDICATES POSITIVE POLARITY OF SPEAKER  
(YELLOW OR WHITE)

SCHEMATIC FOR KR102

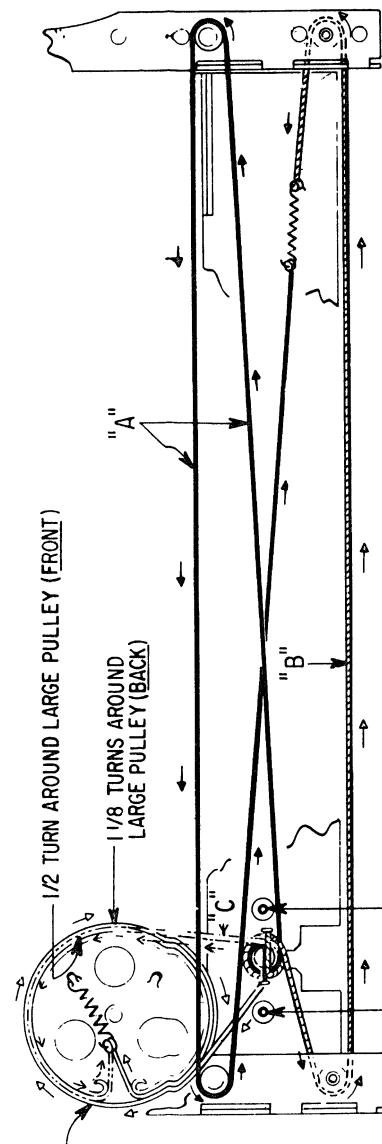
SHOWN IN FIRST POSITION

1ST—OFF  
2ND—RADIAL SPEAKER (ONLY)  
3RD—MASTER & RADIAL SPEAKER



Ⓐ INDICATES POS. POLARITY OF SPEAKER  
(YELLOW OR WHITE)

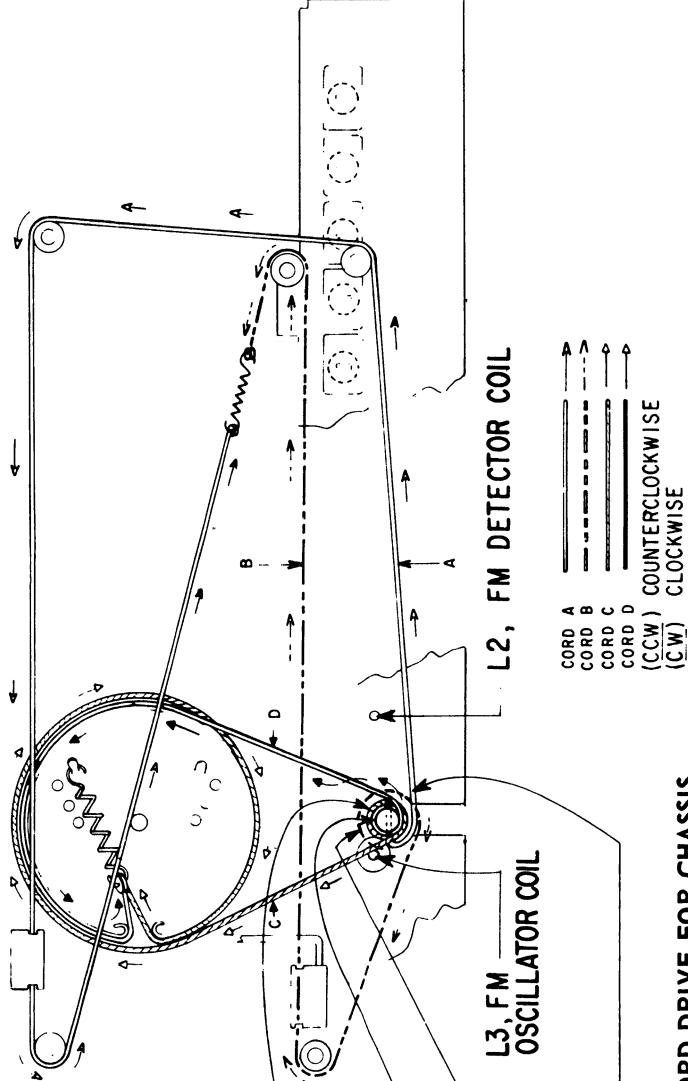
SCHEMATIC FOR KR105



### DIAL CORD DRIVE

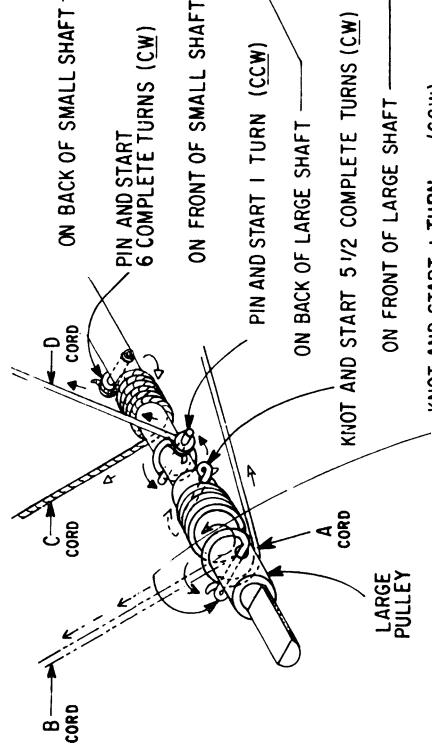
SHOWN IN COUNTERCLOCKWISE POSITION

### DIAL CORD DRIVE FOR CHASSIS 6L01 AND 7L01



### DIAL CORD DRIVE

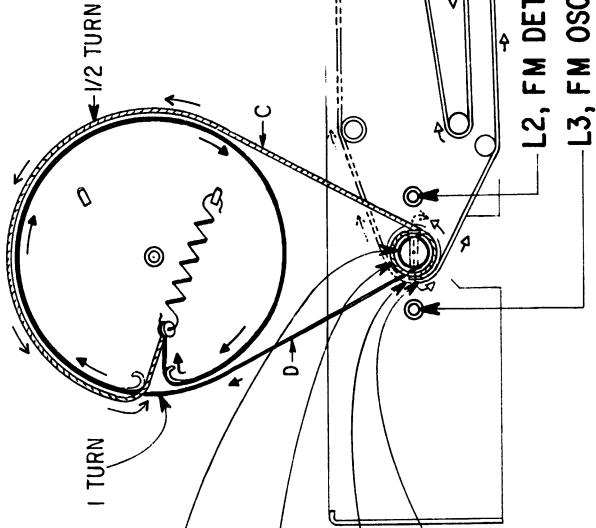
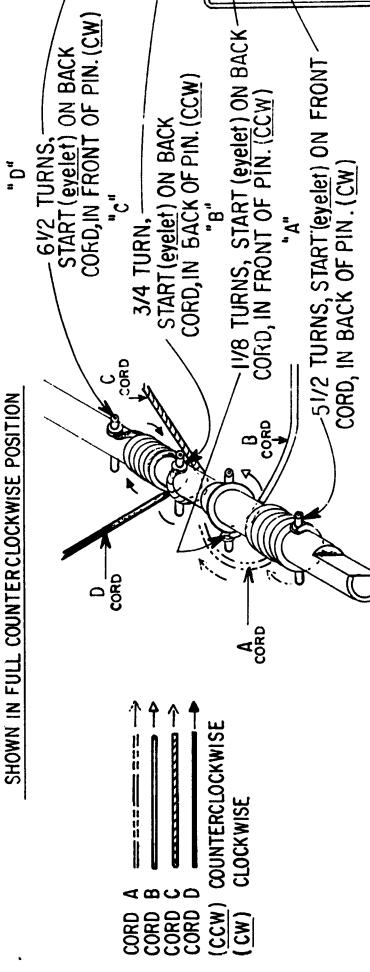
SHOWN IN FULL COUNTERCLOCKWISE POSITION



### DIAL CORD DRIVE FOR CHASSIS 6L20 AND 8L1T20

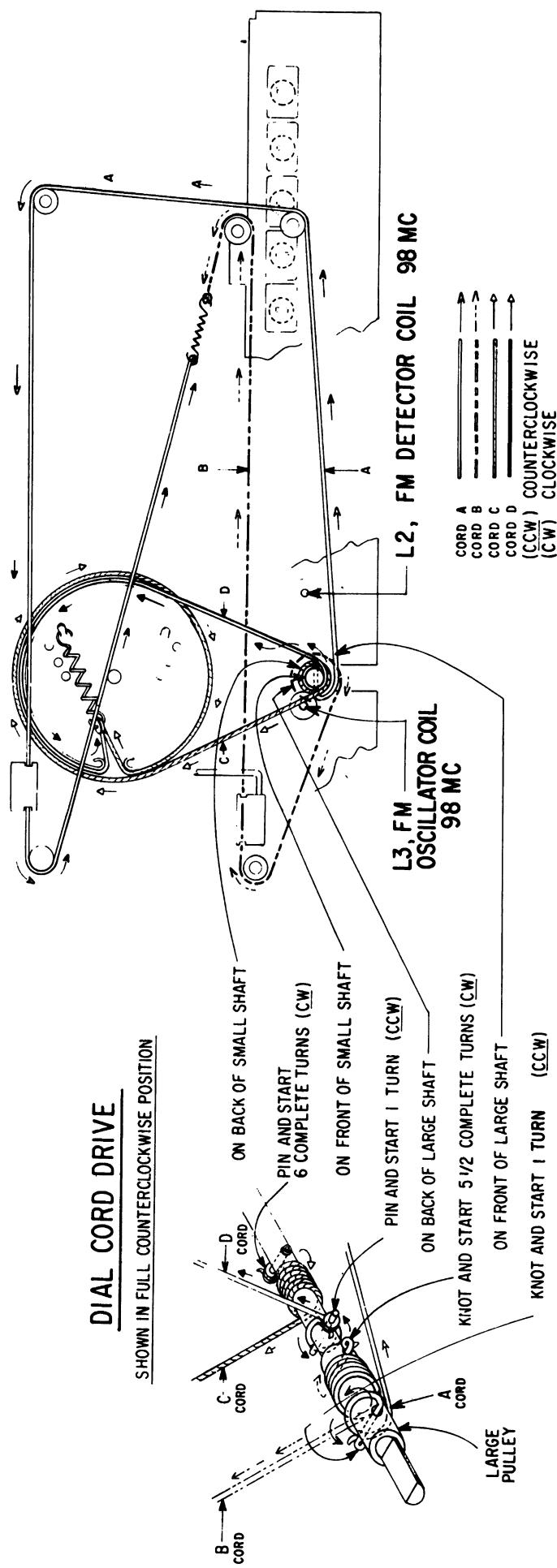
### DIAL CORD DRIVE

SHOWN IN FULL COUNTERCLOCKWISE POSITION

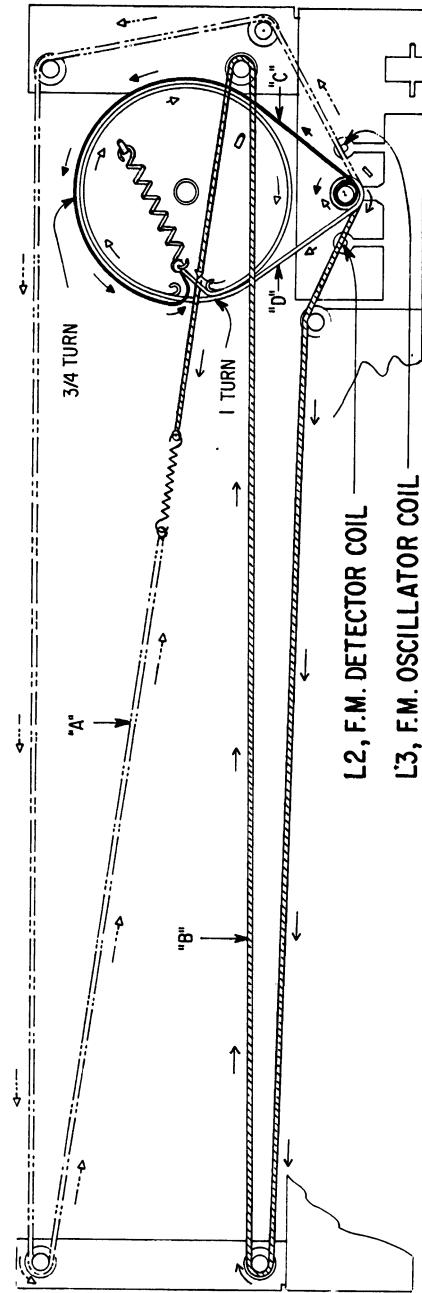
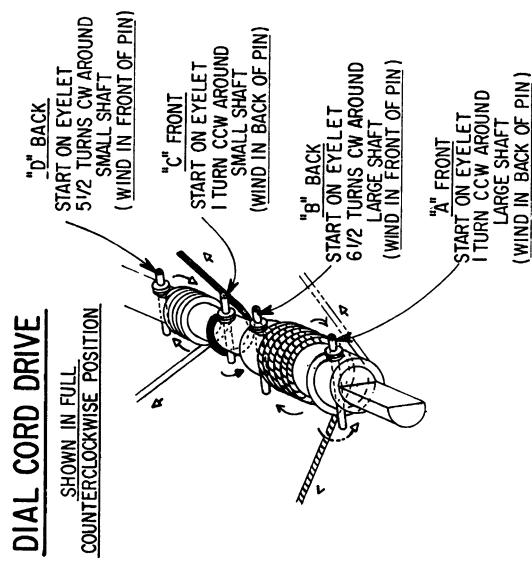


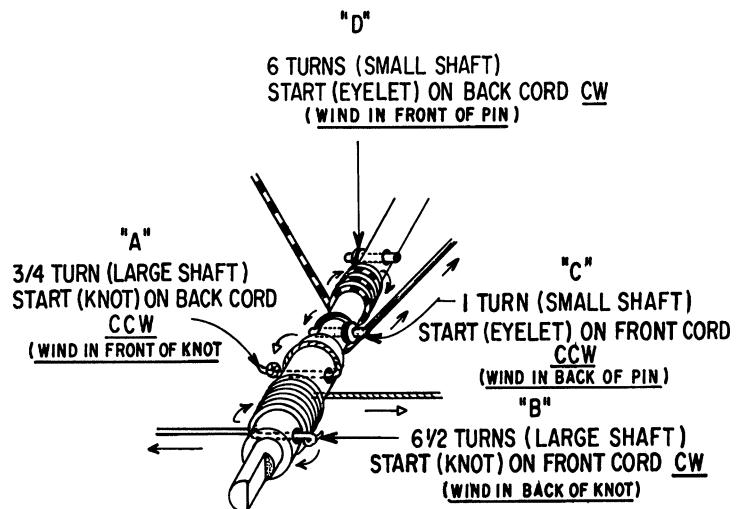
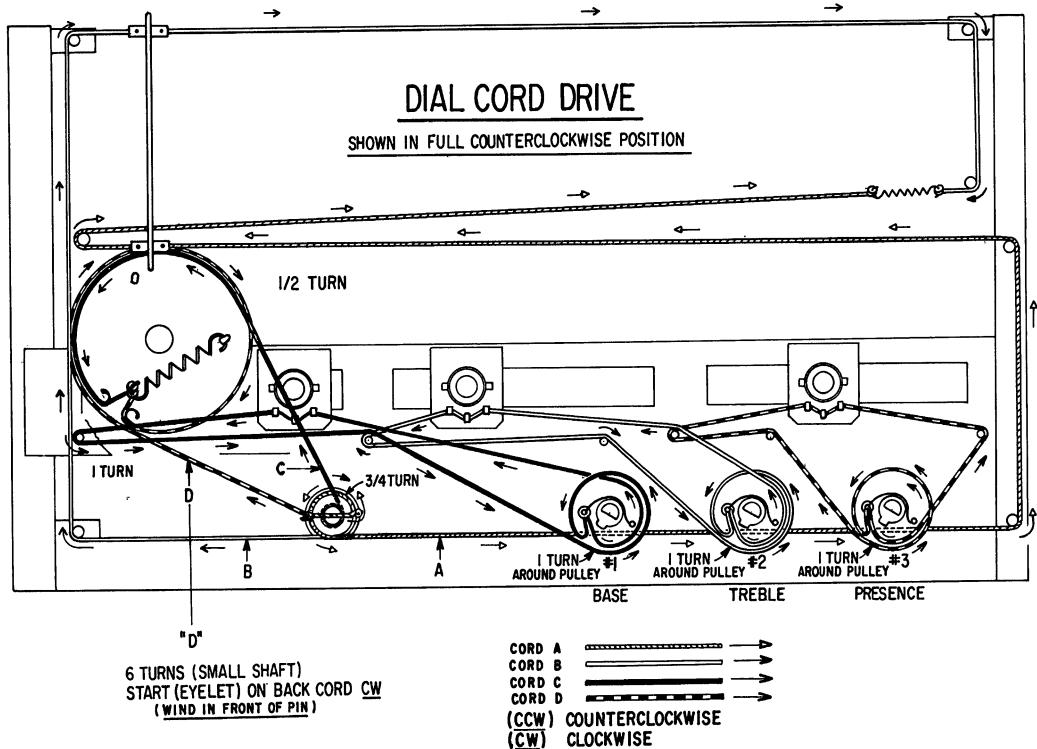
L2, FM DETECTOR COIL 98MC  
L3, FM OSCILLATOR COIL 98MC

DIAL CORD DRIVE FOR CHASSIS 7L22 AND 10L22



DIAL CORD DRIVE FOR CHASSIS 10L23





**DIAL CORD DRIVE FOR CHASSIS 11L8T25Z**

# NUMERICAL PARTS LIST

PART NO.	DESCRIPTION	PRICE	PART NO.	DESCRIPTION	PRICE
<b>CHASSIS 1L20</b>					
22-2786	.068 mfd molded 200V	.45	63-1884	220K ohm resistor 1/2W 20% - (2 req'd)	.17
22-2805	.022 mfd molded 400V	.25	63-5035	Tone control	1.40
22-3762	Electrolytic 40/150 20/150 20/25		63-5036	Volume control and switch	2.05
54-139	3/8-32 x 9/16 Palnut (1 used on each 63-5035 and 5036)	.03	78-1542	Wafer tube socket	.20
63-1729	47 ohm 1/2W 10%	.17	93-1576	Steel washer (2 req'd)	
63-1750	150 ohm 1/2W 10%	.17	95-2041	Output Transformer	
63-1849	33K ohm 1/2W 20%	.17	212-41	Selenium rectifier	
63-1856	47K ohm resistor 1/2W 10%	.17			

## CHASSIS 1L21

11-183	Line cord & plug	63-1856	47K ohm resistor 1/2W 20%	.17
22-2786	.068 mfd capacitor 200V	63-5117	Volume control	
22-2805	.022 mfd capacitor 400V (2 req'd)	63-5118	Tone control	
22-3853	Electrolytic capacitor	78-1542	Wafer tube socket	.20
43-519	Socket contact housing	83-2538	Three lug terminal strip	.10
52-1051	Phono cable	83-3265	Five lug terminal strip	.10
63-1733	56 ohm resistor 1/2W 10%	86-334	Terminal (3 req'd)	.03
63-1750	150 ohm resistor 1/2W 10%	95-2083	Output transformer	
63-1828	10K ohm resistor 1/2W 20%	212-41	Selenium rectifier	

## MODEL LP8 CABINET PARTS

2-1676	Cabinet back	114-390	8-15 x 7/16 x 1/4 Hex hd self-tapping screw (4 used on 1L21)	.03
12-3766	Changer drawer pull bracket	125-62	Rubber grommet	.03
14-5176	Portable phono cabinet - model LP8B	142-125	Dual pickup cartridge (sapphire-sapphire) (1 part of 169-191)	7.00
14-5177	Portable phono cabinet - model LP8L	159-104	Trimount stud (3 req'd)	.03
16-2415	Packing carton	169-191	Four speed record changer (see changer parts list for components)	
17-141	Retaining clamp	.20	166-90	Polyethylene bumper (6 part of each cabinet)
24-1197	Chassis bottom cover		202-2217	Instruction book
46-3444	Control knob - volume & tone (2 req'd) model LP8B		S-59908	Hinge plate & pin assembly
46-3445	Control knob - volume & tone (2 req'd) model LP8L		HDW2049	Handle strap (part of 14-5177) model LP8L
49-999	4" x 6" PM speaker		HDW2050	Handle strap (part of 14-5176) model LP8B
54-138	6-32 Palnut (2 used on 49-999)	.03	HDW4028	Strike (2 part of each cabinet)
57-3997	Mounting plate (2 part of each cabinet)	.30	HDW5010	Catch (2 part of each cabinet)
70-231	#6 x 1" Phillips oval hd wood screw (4 used on 169-191)	.05	HDW10009	Chrome moulding (part of each cabinet)
83-4528	Retaining strip (4 req'd)		GRC162-1	Grille cloth (part of 14-5177) model LP8L
112-1264	6-32 x 1" Speaker mounting screw (2 part of each cabinet)	.03	GRC163-1	Grille cloth (part of 14-5176) model LP8B
112-1520	4-24 x 5/16 Phillips rd hd self-tapping screw (9 mt. 2-1676)			

PART NO.	DESCRIPTION	PRICE	PART NO.	DESCRIPTION	PRICE
<b>CHASSIS 2L20</b>					
11-183	Line cord & plug		63-5154	Control - volume & balance (2 req'd)	
22-2572	.068 mfd capacitor 200V (2 req'd)	.45	78-781	Molded tube socket (2 req'd)	
22-2792	.047 mfd capacitor 200V (2 req'd)	.30	83-1520	Rectifier insulating strip	
22-3854	Electrolytic capacitor		83-2638	Three lug terminal strip	.05
43-519	Socket contact housing	.20	83-2639	Three lug terminal strip	.05
58-214	Connector plug (part of S-60971)	.10	83-3265	Five lug terminal strip	.10
63-1736	68 ohm resistor 1/2W 10%	.17	86-334	Terminal (4 req'd)	.10
63-1803	2700 ohm resistor 1/2W 10%	.17	95-2100	Output transformer (2 req'd)	
63-1856	47K ohm resistor 1/2W 20% (2 req'd)	.17	114-773	6-20 x 1" Hex hd self-tapping screw (used on 212-22)	
63-1905	680K ohm resistor 1/2W 20%		212-22	Selenium rectifier	
63-2897	47 ohm fusing resistor	.50	S-60971	Phono cable & plug assembly	2.20
63-5130	Dual tone control				
63-5145	115 ohm resistor 5W 10%	.75			

## MODEL LPS45 CABINET PARTS

2-1676	Cabinet back		139-125	Speaker baffle - left (part of 14-5171)	
12-3756	Changer drawer pull bracket (part of 14-5174) model LPS45L		139-126	Speaker baffle - right (part of 14-5172)	
12-3757	Changer drawer pull bracket (part of 14-5175) model LPS45J		142-124	Dual pickup cartridge (sapphire-sapphire) (part of 169-192)	7.00
14-5158	Speaker cabinet - left (part of 14-5174) model LPS45L		159-104	Trimount stud (4 req'd)	.03
14-5159	Speaker cabinet - right (part of 14-5174) model LPS45L		166-90	Polyethylene bumper (6 part of each cabinet)	
14-5171	Speaker cabinet - left (part of 14-5175) model LPS45J		169-192	Four speed record changer (see record changer parts list for components)	
14-5172	Speaker cabinet - right (part of 14-5175) model LPS45J		202-2244	Instruction book	
14-5174	Portable phono cabinet - complete - model LPS45L		S-59908	Hinge plate & pin (part of each cabinet)	
14-5175	Portable phono cabinet - complete - model LPS45J		HDW2049	Gray handle strap (part of 14-5174) model LPS45L	
16-2436	Packing carton		HDW2051	Brown handle strap part of 14-5175) model LPS45J	
24-1198	Chassis bottom cover		HDW3065	Male stop hinge - brass (2 part of 14-5175) model LPS45J	
46-3444	Control knob (volume - bass - treble) (3 req'd) model LPS45L		HDW3066	Male stop hinge - nickel (2 part of 14-5174) model LPS45L	
46-3445	Control knob (volume - bass - treble) (3 req'd) model LPS45J		HDW3067	Female stop hinge - brass (2 part of 14-5172)	
49-1001	4" x 6" PM speaker (2 req'd)		HDW3068	Female stop hinge - nickel (2 part of 14-5169)	
54-138	6-32 Palnut (2 used on each 49-1001)	.03	HDW3069	Male stop hinge - brass (2 part of 14-5175) model LPS45J	
57-3997	Mounting plate (2 part of each complete cabinet)	.30	HDW3070	Male stop hinge - nickel (2 part of 14-5174) model LPS45L	
70-200	#6 x 5/8 Phillips rd washer hd wood screw - brass plated (4 used on each speaker baffle)		HDW3071	Female stop hinge - brass (2 part of 14-5171)	
70-231	#6 x 1" Phillips oval hd wood screw (4 used on 169-192)	.05	HDW3072	Female stop hinge - nickel (2 part of 14-5168)	
83-4234	Retaining strip (3 req'd)		HDW4028	Strike - nickel (2 part of 14-5174) model LPS45L	
83-4528	Retaining strip (4 req'd)		HDW4030	Strike - burnished brass (2 part of 14-5175) model LPS45J	
112-1264	6-32 x 1" Speaker mounting screw (2 part of each speaker cabinet)	.03	HDW4031	Strike - brass (2 part of 14-5175) model LPS45J	
112-1520	4-24 x 5/16 Phillips rd hd self-tapping screw (9 mt. 2-1676)		HDW4032	Strike - nickel (2 part of 14-5174) model LPS45L	
114-390	8-15 x 7/16 x 1/4 Hex hd self-tapping screw (5 used on 2L20)	.03			
125-62	Rubber grommet	.03			
139-123	Speaker baffle - left (part of 14-5168)				
139-124	Speaker baffle - right (part of 14-5169)				

PART NO.	DESCRIPTION	PRICE	PART NO.	DESCRIPTION	PRICE
<b>MODEL LPS45 CABINET PARTS Continued</b>					
HDW5010	Catch - nickel (2 part of 14-5174) model LPS45L		HDW12077	Rolled flange eyelet - brass (2 part of each 14-5171 and 14-5172) model LPS45J	
HDW5011	Catch - burnished brass (2 part of 14-5175) model LPS45J		HDW12078	Rolled flange eyelet - nickel (2 part of each 14-5168 and 14-5169) model LPS45L	
HDW5013	Magnetic catch - tan (2 used on each speaker cabinet)		GRC162-2	Grille cloth (1 part of each 14-5168 and 14-5169) model LPS45L	
HDW10009	Chrome moulding (2 part of 14-5174) model LPS45L		GRC176-1	Grille cloth (1 part of each 14-5171 and 14-5172) model LPS45J	
HDW10010	Brass moulding (2 part of 14-5175) model LPS45J				

## CHASSIS 3L01 & 3L01Z

22-3	.01 mfd disc capacitor 500V (2 req'd)	.30	63-1925	2.2 megohm resistor 1/2W 10%	.17
22-12	.0015 mfd disc capacitor 500V (2 req'd)	.25	63-4843	63 ohm resistor 4W 10%	.65
22-13	.0033 mfd disc capacitor 500V (2 req'd)	.25	63-4851	125 ohm resistor 4W 10%	.65
22-17	.001 mfd disc capacitor 1000V (2 req'd)	.25	63-5196	15 ohm fusing type resistor 4W	
			63-5122	Dual bass control & stereo - monaural switch	
22-21	2 x .001 mfd disc capacitor 500V	.40	63-5123	Dual loudness control	
22-1775	.047 mfd capacitor 400V 3L01	.26	63-5124	Dual treble control	
22-2569	.047 mfd capacitor 600V		78-1139	Noval wafer socket (12AX7A)	.20
22-2782	.1 mfd capacitor 600V	.45	78-1156	Noval molded socket (769.5)	
22-3327	30 mmf disc capacitor 500V (2 used on 63-5123)	.25	(2 req'd)	(2 req'd)	.25
22-3859	Dual electrolytic capacitor		83-1635	Insulating strip (used on 63-5123)	.03
22-3903	Electrolytic capacitor		83-2639	Three lug terminal strip	.05
24-1201	Control cover (used on 63-5122)		83-3675	Three lug terminal strip	
43-570	Six contact housing - male	.45	83-3676	Twelve lug terminal strip	.30
54-139	3/8-32 x 9/16 Panut (1 used on each 63-5122, 63-5123 and 63-5124)	.03	83-4232	Four lug terminal strip	.10
58-214	Single prong plug (2 part of each S-53660 and S-59527)	.10	86-328	Felt strip	
63-6066	820 ohm resistor 1W 10%		86-370	Wire retaining terminal (5 req'd)	.03
63-1786	1000 ohm resistor 1/2W 20% (2 req'd)	.17	93-993	Male terminal (6 used on 3L01)	.03
63-1799	2200 ohm resistor 1/2W 10%	.17	93-1183	Insulating washer (used on 63-5123)	.03
63-1814	4700 ohm resistor 1/2W 20%	.17	94-1171	Fibre washer (2 used on each 78-1156)	.03
63-1856	47K ohm resistor 1/2W 20% (2 req'd)	.17	95-1956	Insulating bushing (3 req'd)	.10
63-1876	150K ohm resistor 1/2W 10% (2 used on 63-5123)	.17	114-26	Audio output transformer (2 req'd)	3.00
63-1880	180K ohm resistor 1/2W 10% (2 req'd)	.17	125-26	8-18 x 1/4 x 1/4 Hex hd self-tapping screw (2 used on 95-1956)	
63-1883	220K ohm resistor 1/2W 10% (2 req'd)	.17	199-198	Rubber grommet (4 req'd)	
63-1884	220K ohm resistor 1/2W 20% (2 req'd)	.17	199-350	Shielded sleeve	.05
63-1891	330K ohm resistor 1/2W 20% (2 req'd)	.17	212-27	Spacer sleeve (1 used on 94-1171)	.03
			S-53660	Selenium rectifier	
			S-59527	Shielded lead and plug assembly 3L01	
				Shielded lead and plug assembly 3L01Z	

## CHASSIS 3L02

22-3	.01 mfd disc capacitor - 500V (2 req'd)	.30	22-13	.0033 mfd disc capacitor - 500V (2 req'd)	.25
22-12	.0015 mfd disc capacitor - 500V (2 req'd)	.25	22-17	.001 mfd disc capacitor 1000V (2 req'd)	.25

PART NO.	DESCRIPTION	PRICE	PART NO.	DESCRIPTION	PRICE
<b>CHASSIS 3L02 Continued</b>					
22-21	2 x .001 mfd disc capacitor 500V	.40	63-4843	63 ohm resistor 4W 10%	.65
22-26 <del>55</del> 5	.01 mfd disc capacitor 1400V (used on 63-5123)	.50	63-4851	125 ohm resistor 4W 10%	.65
22-31 <del>25</del> 5	.01 mfd capacitor 600V	.45	63-5122	Dual bass control & stereo - monaural switch	3.50
22-33 <del>27</del> 7	30 mmf disc capacitor 500V (2 used on 63-5123)	.25	63-5123	Dual loudness control	3.00
22-38 <del>59</del> 9	Dual electrolytic capacitor 100/50V 10/25V	2.25	63-5124	Dual treble control	2.75
22-39 <del>63</del> 3	Electrolytic capacitor 150/200V 300/150V 60/150V		63-5243	Fusing type resistor	
24-12 <del>01</del> 1	Control cover (use with 63-5122)	.25	63-5655	470 ohm resistor 2W 20%	
43-57 <del>3</del> 3	Socket contact housing - female (used on 52-1100)	.45	63-6052	390 ohm resistor 1W 10% (2 req'd)	
52-11 <del>00</del> 0	Four conductor cable		78-1139	Noval wafer socket (12AX7A)	.20
54-13 <del>9</del> 9	3/8-32 x 9/16 Palnut - cadmium (1 used on ea. 63-5122, 63-5123 & 63-5124)	.03	78-1156	Noval molded socket (7695) (2 req'd)	
58-23 <del>8</del> 8	Three prong plug (part of S-63542)	.10	83-1635	Insulating strip (used on 63-5123)	.03
58-24 <del>6</del> 6	Two prong plug - AC (part of S-59959)	.15	83-2639	Three lug terminal strip	.05
63-17 <del>86</del> 6	1000 ohm resistor 1/2W 20%		83-2715	Three lug terminal strip	.05
63-17 <del>99</del> 99	(2 req'd)	.17	83-3675	Twelve lug terminal strip	.30
63-18 <del>56</del> 6	2200 ohm resistor 1/2W 10%	.17	83-3676	Four lug terminal strip	.10
63-18 <del>76</del> 6	47K ohm resistor 1/2W 20%		83-4232	Felt strip	.03
63-18 <del>80</del> 80	(2 req'd)	.17	86-328	Terminal - wire retaining (5 req'd)	.03
63-18 <del>83</del> 83	150K ohm resistor 1/2W 10%		86-371	Socket terminal (5 req'd)	.03
63-18 <del>84</del> 84	(2 used on 63-5123)	.17	93-993	Insulating washer (used on 63-5123)	.03
63-18 <del>80</del> 80	180K ohm resistor 1/2W 10%		93-1183	Fibre washer (4 req'd)	.03
63-18 <del>83</del> 83	(2 req'd)	.17	94-1171	Insulating bushing (3 req'd)	.10
63-18 <del>84</del> 84	220K ohm resistor 1/2W 10%		95-2138	Audio output transformer (2 req'd)	
63-18 <del>91</del> 91	(2 req'd)	.17	114-26	8-18 x 1/4 x 1/4 Hex hd self- tapping screw - statuary bronze	
63-19 <del>25</del> 25	220K ohm resistor 1/2W 20%		125-26	(1 used on each 95-2138)	.03
	(2 req'd)	.17	199-198	Rubber grommet (4 req'd)	.03
	330K ohm resistor 1/2W 20%		199-350	Shielded sleeve	.05
	(2 req'd)	.17	212-27	Spacer sleeve (1 used on each 94-1171)	.03
	2.2 megohm resistor 1/2W 10%		S-59959	Silicon rectifier	2.00
		.17	S-63542	AC plug & bracket	.40
				Shielded lead & plug	

## CHASSIS 3L03

11-87	Line cord and plug	1.00	63-1873	120K ohm resistor 1/2W ins. 10%	
22-3	.01 mfd disc - 500V (2 req'd)	.30	63-1887	(2 req'd)	.17
22-14	.0047 mfd disc - 500V (2 req'd)	.25	63-5225	270K ohm resistor 1/2W ins. 10%	
22-21	2 x .001 mfd disc - 500V	.40	63-5226	(2 req'd)	.17
22-26 <del>71</del> 71	25 pf disc - 500V (2 req'd)	.25	63-5227	Dual volume control	
22-27 <del>92</del> 92	.047 mfd tubular - 200V (2 req'd)	.30	63-5228	Balance control	
22-27 <del>94</del> 94	.047 mfd tubular - 600V	.30	63-5229	Dual tone control	
22-39 <del>52</del> 52	20 x 150 mfd electrolytic 150V		63-5266	Fusing type resistor	
43-51 <del>9</del> 9	Socket contact housing - male	.20	63-6007	33 ohm resistor 1W ins. 10%	.25
52-10 <del>76</del> 76	Conductor cable		78-781	Molded tube socket (2 req'd)	
54-13 <del>9</del> 9	3/8-32 x 9/16 Palnut (1 mts each 63-5225, 63-5226 & 63-5227)	.03	78-846	Wafer tube socket	.25
58-21 <del>4</del> 4	Connector plug (2 part of S-62599)	.10	83-2984	5 lug terminal strip	.10
63-17 <del>50</del> 50	150 ohm resistor 1/2W ins. 10%		83-3239	8 lug terminal strip	.15
63-17 <del>51</del> 51	(2 req'd)	.17	86-328	Wire retaining terminal	.03
63-17 <del>51</del> 51	270 ohm resistor 1/2W ins. 10%		86-334	Terminal (4 used on 52-1076)	.10
63-17 <del>96</del> 96	(2 req'd)	.17	95-2136	Output transformer	
63-18 <del>56</del> 56	1800 ohm resistor 1/2W ins. 10%	.17	95-2137	Output transformer	
63-18 <del>56</del> 56	47K ohm resistor 1/2W ins. 20%		212-27	Silicon rectifier	2.00
63-18 <del>53</del> 53	(2 req'd)	.17	S-62599	Cable & phono plug assembly	
	68K ohm resistor 1/2W ins. 20% (2 req'd)	.17			

PART NO.	DESCRIPTION	PRICE	PART NO.	DESCRIPTION	PRICE
<b>CHASSIS 3L04</b>					
22-3	.01 mfd disc capacitor 500V (2 req'd)	.30	63-1884	220K ohm resistor 1/2W 20%	.17
22-12	.0015 mfd disc capacitor 500V (2 req'd)	.25	63-1891	330K ohm resistor 1/2W 20%	.17
22-13	.0033 mfd disc capacitor 500V (2 req'd)	.25	63-1925	2.2 megohm resistor 1/2W 1.0%	.17
22-17	.001 mfd disc capacitor - 1000V (2 req'd)	.25	63-4843	63 ohm resistor 4W 10%	.65
22-21	2 x .001 mfd disc capacitor - 500V	.40	63-4851	125 ohm resistor 4W 10%	.65
			63-5122	Dual bass control & stereo - monaural switch	3.50
22-1775	.047 mfd capacitor - 400V	.26	63-5123	Dual loudness control	3.00
22-2569	.047 mfd capacitor - 600V		63-5124	Dual treble control	2.75
22-2782	.1 mfd capacitor - 600V	.45	63-5196	Fusing type resistor	.40
22-3327	30 mmf disc capacitor 500V (2 req'd)	.25	63-6066	820 ohm resistor 1W 10% (2 req'd)	.25
			78-1139	Noval wafer socket - 12AX7A	.20
22-3859	Dual electrolytic capacitor 100/50V 10/25V	2.25	78-1156	Noval molded socket (7695) (2 req'd)	.25
22-3903	Electrolytic capacitor 20/200V 150/200V 150/200V	4.00	83-1635	Insulating strip (used on 63-5123)	.03
24-1201	Control cover (used with 63-5122)	.25	83-2639	Three lug terminal strip	.05
43-519	Socket contact housing	.20	83-2715	Three lug terminal strip	
52-979	Two conductor shielded lead		83-3675	Twelve lug terminal strip	.30
52-1103	Two conductor cable		83-3676	Four lug terminal strip	.10
52-1109	Four conductor cable		83-4232	Felt strip	.03
54-139	3/8-32 x 9/16 Palnut (1 used on each 63-5122, 63-5123 & 63-5124)	.03	86-328	Terminal (5 req'd)	.03
63-1786	1K ohm resistor 1/2W 20%	.17	86-334	Socket terminal (4 used on 43-519)	.10
	(2 req'd)		93-993	Insulating washer	.03
63-1799	2200 ohm resistor 1/2W 10%	.17	93-1183	Fibre washer (4 req'd)	.03
63-1814	4700 ohm resistor 1/2W 10%	.17	94-1171	Insulating bushing (3 req'd)	.10
63-1856	47K ohm resistor 1/2W 20% (2 req'd)	.17	95-1956	Audio output transformer (2 req'd)	3.00
63-1876	150K ohm resistor 1/2W 10% (2 req'd)	.17	114-26	8-18 x 1/4 x 1/4 AF hex head self-tapping screw - statuary bronze (1 mts each 95-1956)	.03
63-1880	180K ohm resistor 1/2W 10% (2 req'd)	.17	125-26	Rubber grommet (4 req'd)	
63-1883	220K ohm resistor 1/2W 10% (2 req'd)	.17	199-198	Shielded sleeve	.05
			199-350	Spacer sleeve (1 used on each 94-1171)	.03
			212-27	Silicon rectifier	2.00
			S-59959	AC plug & bracket assembly	.40

## CHASSIS 3L05

11-103	Line cord & plug	1.00	63-1870	100K ohm resistor 1/2W 20%	.17
22-2	220 mmf disc capacitor (2 req'd)	.25	63-5266	(2 req'd)	
22-3	.01 mfd disc capacitor (2 req'd)	.30	63-5277	Fusing type resistor	
22-28	2 x .0022 mfd disc capacitor (2 req'd)		63-5278	Dual loudness control	
22-2792	.047 mfd capacitor - 200V (2 req'd)	.30	63-5279	Dual treble control	
22-2794	.047 mfd capacitor - 600V		63-5280	Dual bass control	
22-3999	Electrolytic capacitor 40/15V 40/150V 150/150V		63-5621	Balance control	
54-139	3/8-32 x 9/16 Palnut - cadmium (1 mts each 63-5277, 63-5278, 63-5279 & 63-5280)		63-6007	68 ohm resistor 2W 10%	.34
			63-6084	33 ohm resistor 1W 10%	.25
			78-402	2200 ohm resistor 1W 10%	.25
63-1772	470 ohm resistor 1/2W 20% (2 req'd)	.03	78-806	Four prong socket	.15
63-1852	39K ohm resistor 1/2W 10% (2 req'd)	.17	78-846	Seven pin wafer socket (50C5)	.15
63-1863	68K ohm resistor 1/2W 20% (4 req'd)	.17	78-1099	Noval wafer socket (12AX7A)	
			83-2965	Three prong socket	.20
			83-4838	Seven lug terminal strip	.10
			95-2168	Four lug terminal strip	
			125-96	Output transformer (2 req'd)	
			212-27	Strain relief grommet	
				Silicon rectifier	.10

PART NO.	DESCRIPTION	PRICE	PART NO.	DESCRIPTION	PRICE
<b>CHASSIS 4L21</b>					
11-158	AC cord & plug	.75	63-1929	2.7 megohm resistor 1/2W 10%	.17
15-201	Fuseholder cap	.30	63-1933	3.3 megohm resistor 1/2W 20% (2 req'd)	.17
22-2	220 mmf disc capacitor (2 req'd)	.25	63-1936	3.9 megohm resistor 1/2W 10% (2 req'd)	.17
22-3	.01 mfd disc capacitor (4 req'd)	.30	63-1973	100 ohm resistor 2W 10%	.34
22-13	.0033 mfd disc capacitor (2 req'd)	.25	63-2019	150 ohm resistor 2W 10%	.34
22-16	470 mmf disc capacitor (2 req'd)	.25	63-3176	10K ohm resistor 2W 10% (2 req'd)	.34
22-1156	40 mfd electrolytic capacitor 25V	1.10	63-5112	Dual bass control	3.50
22-1813	.022 mfd capacitor - 600V (2 req'd)		63-5113	Dual treble control	2.75
22-1842	.0047 mfd capacitor - 200V (2 req'd)		63-5114	Dual loudness control	3.50
22-2376	47 mmf capacitor - 500V (4 req'd)	.25	78-402	Four contact socket	.15
22-2510	.033 mfd capacitor - 200V (2 req'd)	.30	78-755	Octal tube socket (5Y3GT)	.20
22-2565	.01 mfd capacitor - 200V (2 req'd)	.25	78-846	Noval wafer socket (12AX7A)	
22-2655	.01 mfd capacitor - 1400V	.50	78-1089	Noval molded socket (6BQ5)	.25
22-3686	Electrolytic capacitor 40/450V 40/450V 40/450V 20/350V	5.50	78-1099	Three contact socket	.20
54-139	3/8-32 x 9/16 Hex palnut - cadmium (1 mts. each 63-5112, 63-5113, 63-5114 & 85-778)	.03	83-2963	Four lug terminal strip	.10
54-473	Fuse receptacle nut	.05	83-2965	Seven lug terminal strip	.10
62-23	Fuse receptacle	.50	83-3239	Eight lug terminal strip	
63-1786	1K ohm resistor 1/2W 20%	.17	83-3652	Three lug terminal strip	.05
63-1789	1200 ohm resistor 1/2W 10% (2 req'd)	.17	83-3937	Seven lug terminal strip	
63-1824	8200 ohm resistor 1/2W 10%	.17	85-798	Lo-bass switch	2.00
63-1852	39K ohm resistor 1/2W 10% (2 req'd)	.17	86-328	Wire retaining terminal (10 req'd)	.03
63-1866	82K ohm resistor 1/2W 10%	.17	93-1036	1/2" Internal lockwasher (used on 62-23)	.03
63-1869	100K ohm resistor 1/2W 10% (2 req'd)	.17	93-1179	Rubber washer (used on 62-23)	.03
63-1883	220K ohm resistor 1/2W 10% (2 req'd)	.17	95-2082	Power transformer	19.00
63-1905	680K ohm resistor 1/2W 20% (2 req'd)	.17	114-699	10-16 x 3/8 x 5/16 AF hex washer hd self-tapping screw	
				statuary bronze (4 mt 95-2082)	.03
				Strain relief grommet (used on 11-158)	.10
				Fuse - 4 amp	.25

### CHASSIS 4L22

11-158	AC Cord & Plug	.75	63-1786	1000 ohm resistor 1/2W 20% (3 req'd)	.17
15-201	Fuseholder Cap	.30	63-1806	3300 ohm resistor 1/2W 10% (2 req'd)	.17
22-2	220 mmf disc capacitor - 500V (2 req'd)	.25	63-1824	8200 ohm resistor 1/2W 10%	.17
22-3	.01 mfd disc capacitor - 500V (2 req'd)	.30	63-1876	150K ohm resistor 1/2W 10% (2 used on 63-5119)	.17
22-14	.0047 mfd disc capacitor - 500V	.25	63-1884	220K ohm resistor 1/2W 20% (2 req'd)	.17
22-26	2x.0015 mfd disc capacitor - 500V	.40	63-1905	680K ohm resistor 1/2W 20% (2 req'd)	.17
22-1813	.022 mfd capacitor - 600V		63-1918	1.5 megohm resistor 1/2W 10% (2 req'd)	.17
22-2376	47 mmf disc capacitor - 500V (4 req'd)	.25	63-1933	3.3 megohm resistor 1/2W 20% (2 req'd)	.17
22-2565	.01 mfd capacitor - 200V (2 req'd)	.25	63-1973	100 ohm resistor 2W 10%	.34
22-2655	.01 mfd disc capacitor - 1400V	.50	63-2019	150 ohm resistor 2W 10%	.34
22-3292	Electrolytic capacitor	1.90	63-3176	10K ohm resistor 2W 10% (2 req'd)	.34
22-3686	Electrolytic capacitor	5.50	63-5112	Dual bass control & stereo - monaural switch	
22-3694	.1 mfd capacitor - 100V (2 req'd)	.35	63-5113	Dual treble tone control	
54-139	3/8-32 x 9/16 Hex palnut (1 used on each 63-5112, 63-5113 & 63-5119)	.03	63-5119	Dual loudness control	
54-473	Fuse receptacle nut	.05	78-402	Four contact socket	.15
62-23	Fuse receptacle	.50	78-755	Octal tube socket (5Y3GT)	.20
63-1743	100 ohm resistor 1/2W 10% (2 req'd)	.17			

PART NO.	DESCRIPTION	PRICE	PART NO.	DESCRIPTION	PRICE
<b>CHASSIS 4L22 Continued</b>					
78-846	Noval wafer socket (12AX7A)		93-1179	Rubber washer (used on 62-23)	.03
78-1089	Noval molded socket (6BQ5) (2 req'd)	.25	95-1957	Audio output transformer (2 req'd)	5.50
78-1099	Three contact socket	.20	95-2082	Power transformer	
83-2965	Seven lug terminal strip	.10	114-699	10-16 x 3/8 x 5/16 hex washer hd self-tapping screw (4 used on 95-2082)	.03
83-3239	Eight lug terminal strip				
83-3265	Five lug terminal strip	.10	125-96	Strain relief grommet (used on 11-158)	
83-3652	Three lug terminal strip	.05			
83-4634	Three lug terminal strip				
86-328	Wire retaining terminal (9 req'd)	.03	136-31	Fuse - 4 amp	
93-1036	1/2" Internal lockwasher (used on 62-23)	.03			

## CHASSIS 4L24

11-145	AC Cord & plug	.80	63-5635	150 ohm resistor 2W 10%	.34
22-3	.01 mfd disc - 500V (2 req'd)	.30	63-5712	10K ohm resistor 2W 10%	.34
22-2796	.047 mfd molded - 400V		78-806	7 Contact wafer socket (6AQ5A-6X4) (3 req'd)	.15
22-2842	.001 mfd molded - 600V		78-846	Noval wafer socket (12AX7 A)	.25
22-3929	Electrolytic 15/300V, 30/350V, 25/25V		78-1099	3 Contact Socket	.20
43-519	4 Contact housing (used on 52-1081)	.20	83-2145	5 Lug terminal strip	.10
52-1081	4 Conductor cable		86-328	4 Lug terminal strip (2 req'd)	.10
54-348	8-32 "KEPS" nut (4 mt. 95-2124)	.05	86-333	Wire retaining terminal (2 req'd)	.03
63-1730	47 ohm resistor 1/2W 20% (2 req'd)	.17	86-334	Connector terminal (2 req'd)	.03
63-1806	3300 ohm resistor 1/2W 10% (2 req'd)	.17	86-344	Socket terminal (4 used on 52-1081)	.10
63-1887	270K ohm resistor 1/2W 20% (2 req'd)	.17	95-2122	Connector terminal (3 part of S-62671)	.03
63-1898	470K ohm resistor 1/2W 20% (2 req'd)	.17	95-2123	Audio output transformer	
			95-2124	Audio output transformer (2 req'd)	
			S-62671	Power transformer	
				Speaker lead & terminal assembly	

## CHASSIS 5L29

11-158	AC Cord & Plug	.75	22-3140	270 mfd disc capacitor - 500V (2 req'd)	.25
15-201	Fuseholder cap	.30	22-3245	Electrolytic capacitor	4.75
22-3	.01 mfd disc capacitor - 500V (2 req'd)	.30	54-139	3/8-32 x 9/16 hex palnut (1 used on each 63-5114, 63-5115, 63-5116 & 85-798)	.03
22-14	.0047 mfd disc capacitor - 500V (4 req'd)	.25	54-473	Fuse receptacle nut	.05
22-16	470 mmf disc capacitor - 500V (2 req'd)	.25	62-23	Fuse receptacle	.50
22-18	.0022 mfd disc capacitor - 500V (4 req'd)	.25	63-1758	220 ohm resistor 1/2W 20%	.17
22-1156	Electrolytic capacitor	1.10	63-1778	680 ohm resistor 1/2W 10%	.17
22-1842	.0047 mfd capacitor - 200V (2 req'd)	.26	63-1786	1000 ohm resistor 1/2W 20% (2 req'd)	.17
22-1844	.047 mfd capacitor - 600V (2 req'd)	.35	63-1796	1800 ohm resistor 1/2W 10% (2 req'd)	.17
22-1901	.033 mfd capacitor - 600V (2 req'd)		63-1803	2700 ohm resistor 1/2W 10% (2 req'd)	.17
22-2376	47 mmf disc capacitor - 500V (2 req'd)	.25	63-1817	5600 ohm resistor 1/2W 10% (3 req'd)	.17
22-2565	.01 mfd capacitor - 200V (2 req'd)	.25	63-1855	47K ohm resistor 1/2W 10% (2 used on 63-5116)	.17
22-2655	.01 mfd capacitor - 1400V	.50	63-1856	47K ohm resistor 1/2W 20% (2 req'd)	
22-3076	Electrolytic capacitor - 10/25V	1.75			

PART NO.	DESCRIPTION	PRICE	PART NO.	DESCRIPTION	PRICE
<b>CHASSIS 5L29 Continued</b>					
63-1-866	82K ohm resistor 1/2W 10% (2 req'd)	.17	78-755	Octal tube socket (5Y3GT)	.20
63-1-869	100K ohm resistor 1/2W 10% (2 used on 63-5114)	.17	78-846	Noval wafer socket (12AX7A)	
63-1-870	100K ohm resistor 1/2W 20% (2 req'd)	.17	78-1089	Noval molded socket (6BQ5) (2 req'd)	.25
63-1-887	270K ohm resistor 1/2W 10% (2 used on 63-5116)	.17	78-1099	Three contact socket	.20
63-1-891	330K ohm resistor 1/2W 20% (2 req'd)	.17	78-1270	Noval wafer socket (6FQ7-6CG7)	.20
63-1-925	2.2 megohm resistor 1/2W 10% (2 req'd)	.17	83-2639	Three lug terminal strip	.05
63-1-929	2.7 megohm resistor 1/2W 10%	.17	83-3239	Eight lug terminal strip (3 req'd)	.15
63-1-936	3.9 megohm resistor 1/2W 10% (2 req'd)	.17	83-3652	Three lug terminal strip	.05
63-2-019	150 ohm resistor 2W 10%	.34	85-798	Lo-bass switch	2.00
63-4-687	5K ohm resistor 3W 10%	.45	86-328	Wire retaining terminal (9 req'd)	.03
63-5-114	Dual loudness control	3.50	93-1036	1/2" Internal lockwasher (used on 62-23)	.03
63-5-115	Dual treble tone control	2.75	93-1179	Rubber washer (used on 62-23)	.03
63-5-116	Dual bass control & stereo - monaural switch	2.50	95-1650	Audio output transformer (2 req'd)	4.75A
78-4-02	Four contact socket	.15	95-2082	Power transformer	19.00A
			114-699	10-16 x 3/8 x 5/16 hex washer	
			125-96	hd self-tapping screw (4 used on 95-2082)	.03
			136-31	Strain relief grommet (used on 11-158)	.10
				Fuse - 4 amp	.25

## CHASSIS 6L01

12-3-385	Tuner bracket	.40	54-139	3/8-32 x 9/16 palnut - cadmium (used on 85-802)	.03
17-1-81	Cable clamp		56-426	Roll pin (4 used on 76-1398)	.05
19-2-38	Coil mounting clip (1 part of each S-52362 & S-61505)	.10	56-512	Roll pin (2 used on 76-1399)	
19-3-22	Coil mounting clip (2 req'd)	.05	57-4806	Dial background plate	
22-3	.01 mfd disc capacitor - 500V (9 req'd)	.30	58-214	Single prong plug (2 part of S-54511)	.10
22-5	100 mmf disc capacitor - 500V	.25	59-568	Dial pointer	
22-9	100 mmf disc capacitor - 500V 10%	.25	63-1740	82 ohm resistor 1-1/2W 10% (used on S-52362)	.17
22-1-4	.0047 mfd disc capacitor - 500V	.25		680 ohm resistor 1/2W 20% (3 req'd)	.17
22-1-5	470 mmf disc capacitor - 500V (2 req'd)	.25	63-1779	1000 ohm resistor 1/2W 20% (2 req'd)	.17
22-1-7	.001 mfd disc capacitor - 1000V	.25	63-1786	4700 ohm resistor 1/2W 20%	.17
22-1-8	.0022 mfd disc capacitor - 500V	.25	63-1814	22K ohm resistor 1/2W 20% (2 req'd)	.17
22-2-1	2x.001 mfd disc capacitor - 500V (used on S-52362)	.40	63-1842	47K ohm resistor 1/2W 20%	.17
22-1-888	.001 mfd ceramic capacitor - 500V (used on S-62887)	.25	63-1856	56K ohm resistor 1/2W 10% (2 req'd)	.17
22-2-569	.047 mfd capacitor - 600V (2 req'd)	.40	63-1859	100K ohm resistor 1/2W 20%	.17
22-2-732	Feed-Thru capacitor - 500V - (4 req'd)	.30	63-1870	150K ohm resistor 1/2W 10% (2 req'd)	.17
22-3-456	2x12 mmf disc capacitor - 500V (used on S-64580)	.30	63-1876	330K ohm resistor 1/2W 20%	.17
22-3-621	22 mmf disc capacitor - 500V (used on S-64580)	.25	63-1891	1 megohm resistor 1/2W 20% (3 req'd)	.17
22-3-627	.047 mfd capacitor - 100V	.35	63-1912	2.2 megohm resistor 1/2W 20% (2 req'd)	.17
22-3-675	10 mmf disc capacitor - 500V (used on S-64580)	.25	63-1926	4.7 megohm resistor 1/2W 10%	.17
22-3-939	26 mmf disc capacitor - 500V (used on S-62887)		63-1939	2200 ohm resistor 1/4W 10%	.17
22-3-961	Variable capacitor		63-4199	220K ohm resistor 1/4W 10%	.17
24-1-239	Tuner cover		63-4283		
43-5-119	Socket contact housing (used on 52-996)	.20			
43-5-70	Socket contact housing (male)	.45			
52-9-96	Four conductor cable	.65			

PART NO.	DESCRIPTION	PRICE	PART NO.	DESCRIPTION	PRICE
<b>CHASSIS 6L01 Continued</b>					
63-5238	300 ohm resistor 10W 10%		94-976	Insulating bushing (4 req'd)	.05
76-1398	Drive Shaft - tuner		95-1505	2nd I.F. transformer (AM)	2.50
76-1399	Extension Shaft - tuner		95-1718	1st I.F. transformer (AM)	2.50
76-1402	Guide shaft		95-1864	2nd & 3rd I.F. transformer (FM) (2 req'd)	
76-1403	Guide shaft		95-1866	Discriminator transformer (FM)	2.50
78-1099	Three contact socket	.20	95-2120	1st I.F. transformer (FM)	
78-1314	Wafer socket (12AU6 - 12BA6) (3 req'd)		103-47	Diode	3.75
78-1357	Wafer socket (12BE6)		105-42	R/C network	.50
78-1364	Noval wafer socket (12DT8)		113-8	6-32 x 1/4 x 1/4 hex hd machine screw - steel - internal lockwasher attached (3 mt. 22-3961)	
78-1590	Wafer socket (12AL5)		114-809	8-18 x 3/16 hex hd self-tapping screw - statuary bronze (2 used on each S-64123, S-64124 & 57-4806)	
80-209	Drive cord tension spring	.03	126-937	Tube shield & base	.10
80-1140	Drive cord tension spring	.10	126-1031	Tube shield & base	
80-1467	Retaining spring	.05	126-1063	Shield	
80-1468	Grounding spring	.05	149-211	Iron core (part S-61505)	.10
83-1475	Cable insulating strip (used on 17-181)	.03	149-335	Iron core & spring	
83-1635	Insulating strip (used on 85-802)	.03	149-336	Iron core & spring	
83-2612	Two lug terminal strip	.05	188-232	Retaining ring (4 req'd)	.03
83-3561	Cable retaining strip	.05	199-381	Shielded paper sleeve	
83-3783	Single lug terminal strip	.05	S-52362	FM antenna coil	.60
83-3843	Twelve lug terminal strip	.35	S-54511	Shielded lead & plug	1.25
83-3862	Pointer support strip (1 part of each S-57222)	.20	S-57222	Pointer support strip & ring (2 req'd)	
83-4086	Insulating strip	.03	S-61505	AM oscillator coil & wire	
83-4751	Special terminal strip		S-62836	Drive cord & eyelet 25 3/8"	1.00
85-802	Bandswitch		S-62887	FM detector coil	
86-328	Wire retaining terminal (3 req'd)	.03	S-63622	Drive cord & eyelet 7"	
86-334	Socket terminal (4 req'd)		S-63623	Drive cord & eyelet 13"	
86-370	Socket terminal (5 req'd)	.03	S-63625	Drive cord & eyelet 35"	
90-664	Spacer sleeve (4 req'd)		S-64123	Bracket & pulley - L.H.	
93-993	Bakelite washer (used on 85-802)	.03	S-64124	Bracket & pulley - R.H.	
94-613	Iron core bushing (2 req'd)	.10	S-64572	Loop loading coil	
94-773	Coil insert		S-64580	FM oscillator coil	

## CHASSIS 7L01

12-3385	Tuner bracket	.40	22-18	.0022 mfd disc capacitor - 500V	.25
17-181	Cable clamp		22-21	2x.001 mfd disc capacitor - 500V (used on S-52362)	.40
19-238	Coil mounting clip (part of each (S-52362 & S-61505)	.10	22-1888	.001 mfd ceramic capacitor - 500V (used on S-62887)	.25
19-322	Coil mounting clip (2 req'd)	.05	22-2569	.047 mfd capacitor - 600V (2 req'd)	.40
22-3	.01 mfd disc capacitor - 500V (14 req'd)	.30	22-2732	Feed-thru capacitor 500V (5 req'd)	.30
22-5	100 mmfd disc capacitor - 500V (2 req'd)	.25	22-3318	.001 mfd disc capacitor 25W	.25
22-9	100 mmfd disc capacitor - 500V	.25	22-3456	2x12 mmfd disc capacitor 500V (used on S-64580)	.30
22-13	.0033 mfd disc capacitor - 500V	.25	22-3537	.047 mfd capacitor - 200V	.30
22-14	.0047 mfd disc capacitor - 500V	.25	22-3591	.1 mfd capacitor - 200V	.30
22-16	470 mmfd disc capacitor - 500V (3 req'd)	.25	22-3621	22 mmfd disc capacitor - 500V (used on S-64580)	.25
22-17	.001 mfd disc capacitor - 1000V (2 req'd)	.25			

PART  
NO.

## DESCRIPTION

## PRICE

PART  
NO.

## DESCRIPTION

## PRICE

## CHASSIS 7L01 Continued

22-3-626	.22 mfd capacitor - 100V (2 req'd)	.50	63-4199	2200 ohm resistor 1/4 W 10%	.17
22-3-627	.047 mfd capacitor - 100V	.35	63-4283	220K ohm resistor 1/4W 10%	.17
22-3-645	1000 mmfd mica capacitor - 100V	.75	63-4851	125 ohm resistor 4W 10%	.65
22-3-675	10 mmfd disc capacitor - 500V (used on S-64580)	.25	63-4880	Potentiometer	1.40
22-3-774	2 mmfd disc capacitor - 500V	.25	76-1398	Drive shaft - tuner	
22-3-939	26 mmfd disc capacitor - 500V (used on S-62887)		76-1399	Extension shaft - tuner	
22-3-961	Variable Capacitor		76-1402	Guide shaft	
24-1 239	Tuner cover		76-1403	Guide shaft	
43-519	Socket contact housing (used on 52-996)	.20	78-1099	Three contact socket	.20
43-570	Socket contact housing	.45	78-1314	Wafer socket (12AU6 - 12BA6) (3 req'd)	
52-996	Four conductor cable	.65	78-1319	Noval wafer socket (19EA8)	
54-1 39	3/8-32 x 9/16 palnut - cadmium (used on 85-800)	.03	78-1357	Wafer socket (12BE6)	
56-4-26	Roll pin (4 used on 76-1398)	.05	78-1591	Noval wafer socket (19GQ7)	
56-5-12	Roll pin (2 used on 76-1399)		78-1595	Noval wafer socket (12DT8)	
57-4-806	Dial background plate		80-209	Drive cord tension spring	.03
58-2-14	Single prong plug (2 part of S-54511)	.10	80-1140	Drive cord tension spring	.10
59-5-68	Dial pointer		80-1467	Retaining spring	.05
63-1 740	82 ohm resistor 1/2W 10% (used on S-52362)	.17	80-1468	Grounding spring	.05
63-1 744	100 ohm resistor 1/2W 20%	.17	83-1475	Cable insulating strip (used on 17-181)	.03
63-1 779	680 ohm resistor 1/2W 20% (4 req'd)	.17	83-1635	Insulating strip (used on 85-800)	.03
63-1 786	1K ohm resistor 1/2W 20%	.17	83-1693	Two lug terminal strip	
63-1 799	2200 ohm resistor 1/2W 10%	.17	83-2145	Five lug terminal strip (part of S-64261)	
63-1 800	2200 ohm resistor 1/2W 20%	.17	83-2307	Four lug terminal strip	.10
63-1 824	8200 ohm resistor 1/2W 10%	.17	83-2612	Two lug terminal strip	.05
63-1 841	22K ohm resistor 1/2W 10%	.17	83-3561	Cable retaining strip	.05
63-1 842	22K ohm resistor 1/2W 20% (2 req'd)	.17	83-3783	Single lug terminal strip	.05
63-1 852	39K ohm resistor 1/2W 10%	.17	83-3843	Twelve lug terminal strip	.35
63-1 855	47K ohm resistor 1/2W 10% (3 req'd)	.17	83-3862	Pointer support strip (1 part of each S-57222)	.20
63-1 856	47K ohm resistor 1/2W 20% (2 req'd)	.17	83-4086	Insulating strip	.03
63-1 859	56K ohm resistor 1/2W 10% (used on S-64580)	.17	83-4751	Special terminal strip	
63-1 869	100K ohm resistor 1/2W 10% (6 req'd)	.17	85-800	Bandswitch	
63-1 883	220K ohm resistor 1/2W 10%	.17	86-328	Wire retaining terminal (2 req'd)	.03
63-1 890	330K ohm resistor 1/2W 10%	.17	86-334	Socket terminal (4 used on 52-996)	.10
63-1 891	330K ohm resistor 1/2W 20%	.17	86-370	Socket terminal (5 req'd)	.03
63-1 897	470K ohm resistor 1/2W 10%	.17	90-664	Spacer sleeve (4 req'd)	
63-1 912	1 megohm resistor 1/2W 20% (7 req'd)	.17	93-993	Bakelite washer (used on 85-800)	.03
63-1 926	2.2 megohm resistor 1/2W 20% (3 req'd)	.17	94-613	Iron core bushing (2 req'd)	.10
63-1 939	4.7 megohm resistor 1/2W 10%	.17	94-773	Coil	
63-1 940	4.7 megohm resistor 1/2W 20%	.17	94-976	Insulating bushing (4 req'd)	.05
63-1 954	10 megohm resistor 1/2W 20%	.17	95-1505	2nd I.F. transformer (AM)	2.50
			95-1718	1st I.F. transformer (AM)	2.50
			95-1866	Discriminator transformer (FM)	2.50
			95-1919	2nd & 3rd I.F. transformer (FM) (2 req'd)	2.50
			95-2073	Input mixer transformer	2.50
			95-2076	Doubler mixer transformer	4.50
			95-2077	Detector mixer transformer	3.00
			95-2078	Trap Coil Transformer	
			95-2120	1st I.F. transformer (FM)	
			103-23	Diode (2 req'd)	.75
			103-34	Diode (2 req'd)	1.00
			103-47	Diode	3.75
			105-42	R/C network	.50
			113-8	6-32 x 1/4 hex hd (Internal lock- washer attached) (3 used on 22-3961)	
			114-809	8-18 x 3/16 hex hd self-tapping screw - statuary bronze (2 used on each S-64123, S-64261 & 57-4806)	.03
			126-937	Tube shield & base	.10

PART  
NO.

DESCRIPTION

PRICE

PART  
NO.

DESCRIPTION

PRICE

## CHASSIS 7L01 Continued

126-1063	Shield		S-62836	Drive cord & eyelet assembly
126-1067	Tube shield & base			25 3/8"
149-211	Iron core (part of S-61505)	.10	S-62887	FM detector coil assembly
149-335	Iron core & spring		S-64123	Bracket & pulley assembly L.H.
149-336	Iron core & spring		S-64261	Bracket & pulley assembly R.H.
188-232	Retaining ring (4 req'd)	.03	S-63622	Drive cord & eyelet assembly 7"
S-52362	FM antenna coil assembly	.60	S-63623	Drive cord & eyelet assembly 13"
S-54511	Shielded lead & plug assembly		S-63625	Drive cord & eyelet assembly 35"
S-57222	Pointer support strip & ring assembly (2 req'd)		S-64572	Loop loading coil assembly
S-61505	AM oscillator coil & wire assembly	1.00	S-64580	FM oscillator coil assembly

## CHASSIS 7L22

12-3385	Tuner Bracket	.40	63-1779	680 ohm resistor 1/2W 20%
12-3698	Capacitor mtg bracket	.20		(2 req'd)
12-3884	Chassis mtg bracket (L.H.)		63-1786	1K ohm resistor 1/2W 20%
12-3888	Dial background bracket		63-1806	3300 ohm resistor 1/2W 10%
19-238	Coil mtg clip (1 part of each S-61505 & S-52362)	.10	63-1835	(2 req'd)
19-322	Coil mtg clip (2 req'd)	.05	63-1842	15K ohm resistor 1/2W 20%
22-3	.01 mf disc capacitor (9 req'd)	.30	63-1852	22K ohm resistor 1/2W 20%
22-9	.100 pf disc capacitor (3 req'd)	.25	63-1856	39K ohm resistor 1/2W 10%
22-12	.0015 mf disc capacitor	.25	63-1859	47K ohm resistor 1/2W 20%
22-13	.0033 mf disc capacitor	.25	63-1870	56K ohm resistor 1/2W 10%
22-17	.001 mf disc capacitor - 1000V (2 req'd)	.25	63-1876	100K ohm resistor 1/2W 20%
22-18	.0022 mf disc capacitor (2 req'd)	.25	63-1883	150K ohm resistor 1/2W 10%
22-26	2 x .0015 mf Disc capacitor	.40		(3 req'd)
22-1669	100 pf ceramic capacitor	.25	63-1884	220K ohm resistor 1/2W 10%
22-1778	.047 mf capacitor	.30		(7 req'd)
22-1888	.001 mf ceramic capacitor	.25	63-1890	220K ohm resistor 1/2W 20%
22-2072	.022 mf capacitor - 400V			(2 req'd)
22-2732	Feed thru capacitor (4 req'd)	.30	63-1911	330K ohm resistor 1/2W 10%
22-2883	Electrolytic capacitor (50 mfd 12V)	1.10	63-1912	(3 req'd)
22-3255	330 pf disc capacitor	.25		1 meghm resistor 1/2W 10%
22-3456	2 x 12 pf Disc capacitor	.30	63-1915	1 meghm resistor 1/2W 20%
22-3621	22 pf disc capacitor	.25	63-1926	(2 req'd)
22-3675	10 pf disc capacitor	.25	63-1929	1.2 meghm resistor 1/2W 10%
22-3694	.1 mf capacitor - 100V	.35	63-1933	2.2 meghm resistor 1/2W 20%
22-3763	.01 mf capacitor - 200V (2 req'd)	.30		2.7 meghm resistor 1/2W 10%
22-3808	Electrolytic capacitor		63-1939	3.3 meghm resistor 1/2W 20%
22-3864	Two section variable capacitor	4.00	63-4199	(2 req'd)
22-3939	26 pf disc capacitor	.25	63-4395	4.7 meghm resistor 1/2W 10%
24-1268	Tuner cover			2200 ohm resistor 1/4 W 10%
43-570	Six contact housing - male	.45	63-5268	.17
43-574	Nine contact housing	.35	63-5269	Bass control
52-996	Four conductor cable	.65	63-5270	Treble control
52-1114	Two conductor shielded lead		63-5715	12K ohm resistor 2W 10%
54-139	3/8-32 x 9/16 Palnut-cadmium (1 mts each 63-5268, 63-5269, 63-5270 & 85-808)	.03	76-1377	Guide shaft
57-3519	Antenna mtg plate	.10	76-1451	Drive shaft
59-622	Dial pointer		76-1453	Guide shaft
63-1740	82 ohm resistor 1/2W 10%	.17	78-346	Five contact socket
63-1743	100 ohm resistor 1/2W 10% (3 req'd)	.17	78-1099	Three contact socket
63-1758	220 ohm resistor 1/2W 20% (2 req'd)	.17	78-1323	Wafer socket (12AU6)
63-1778	680 ohm resistor 1/2W 10%	.17	78-1324	Noval Wafer socket (12BA6)
			78-1372	Wafer Socket (12BE6)
			78-1373	Noval wafer socket (12DT8B)
			78-1599	Wafer socket (12BA6)
			78-1600	Noval wafer socket (6GQ7)

PART NO.	DESCRIPTION	PRICE	PART NO.	DESCRIPTION	PRICE
<b>CHASSIS 7L22 Continued</b>					
78-1602	Noval wafer socket (12AX7A)		114-77	6-20 x 5/16 x 1/4 AF Hex hd self-tapping screw statuary bronze (2 mt 12-3698)	.03
80-1140	Tension spring (pointer)	.10	114-564	8-18 x 5/16 Hex hd self-tapping screw statuary bronze - flat washer attached (2 mt S-61348)	.03
80-1188	Tension spring (gang)	.10	114-801	8-18 x 5/16 x 1/4 AF Hex hd self-tapping screw statuary bronze (2 mt. each S-64619, S-64625, S-64626, 12-3888 & 4 mts each S-64624, 12-3884 & 1 mts 57-3519)	.03
80-1467	Retaining spring	.05		Tube shield & base (3 req'd)	.10
80-1468	Grounding spring	.05		Shield	
83-1475	Armitite strip		126-937	Iron core (part of S-61505)	.10
83-2145	Five lug terminal strip	.10	126-1077	Iron core & spring	.25
83-2964	Six lug terminal strip		149-211	Iron core & spring	
83-3265	Five lug terminal strip	.10	149-335	Clamping Ring (4 req'd)	.03
83-3561	Cable retaining strip	.05	188-232	Shield Paper sleeve	
83-3660	Two lug terminal strip	.03	199-171	Drive cord & eyelet assembly	.10
83-3677	Sixteen lug terminal strip	.40	S-40013	FM antenna coil assembly	.60
83-3889	Single lug terminal strip	.05	S-52362	Antenna Assembly	2.50
83-4125	Two lug terminal strip	.10	S-61348	AM Oscillator coil assembly	1.00
83-4655	Two lug terminal strip		S-61505	Pointer Support strip & ring assembly	.10
85-808	Bandswitch		S-61711	FM Detector coil assembly	
86-328	Wire retaining terminal	.03	S-62887	FM Oscillator coil assembly	
86-389	Terminal (9 req'd)	.03	S-62889	Tone control bracket assembly	
86-390	Terminal (4 req'd)	.03	S-64619	Chassis mtg bracket assembly	
94-613	Iron core bushing (2 req'd)	.10	S-64624	Bracket & pulley assembly	
94-773	Coil insert (part of S-61505)	.10	S-64625	Bracket & pulley assembly	
95-1505	3rd I.F. transformer (AM)	2.50	S-64626	Drive cord & eyelet assembly	
95-1718	1st I.F. transformer (AM)	2.50	S-64643	Drive cord & eyelet assembly	
95-1866	Discriminator transformer (FM)	2.50	S-64644	Drive cord & eyelet assembly	
95-1919	2nd & 3rd I.F. transformer (FM)	2.50	S-64645	Drive cord & eyelet assembly	
95-1922	2nd I.F. transformer (AM)	2.50			
95-2120	1st I.F. transformer (FM)				
103-47	AFC diode				
105-42	R/C network	.50			
113-8	6-32 x 1/4 x 1/4 AF Hex hd mach screw - lockwasher attached (1 joins each 83-4125 & 12-3698 to 22-3864)	.03			

## CHASSIS 8L1T20

12-3249	Variable capacitor mtg bracket	.05	46-3513	Push button - FM	.35
12-3892	Escutcheon mtg bracket (R.H.)		46-3514	Push button - AFC	.35
19-306	Coil mtg clip (2 req'd)	.10	46-3515	Push button - Phono	.35
19-440	Dial crystal retaining clip (2 req'd)	.10	46-3516	Push button - off	.35
19-446	Dial scale retaining clip	.03	52-978	Two conductor shielded lead	.75
22-3	.01 mf disc capacitor - 500V (10 req'd)	.30	52-1098	Three conductor cable & plug	.80
22-5	100 pf disc capacitor - 500V	.25	54-12	6-32 x 5/16 Hex nut (mts. 212-23)	
22-7	.001 mf disc capacitor - 500V		54-504	Tinnerman speed nut (used on S-60934)	.03
22-13	.0033 mf disc capacitor - 500V	.25	54-541	Palnut (2 used on 19-440 & 4 used on 83-4535)	.03
22-17	.001 mf disc capacitor - 500V	.25	54-549	Tinnerman speed nut (2 used on 192-319)	.03
22-18	.0022 mf disc capacitor - 500V (5 req'd)	.25		Antenna mounting plate	.10
22-2370	50 pf disc capacitor	.25	57-3519	Dial scale background plate	2.00
22-2655	.01 mf capacitor - 1400V	.50	57-4372	Chassis bottom plate	1.00
22-3255	330 pf disc capacitor	.25	57-4373	Trim plate (part of S-64565)	1.50
22-3441	.22 mfd capacitor - 100V	.45	57-4374	Three prong plug (used on 52-978)	.10
22-3537	.047 mf capacitor - 200V (3 req'd)	.30	58-238	Dial pointer	.60
22-3618	10 mf electrolytic capacitor	1.25	59-547	68 ohm resistor 1/2W 10% (2 req'd)	.17
22-3636	Electrolytic capacitor 150/150V 150/150V 60/150V	3.00	63-1736	100 ohm resistor 1/2W 20% (2 req'd)	.17
22-3862	Three section variable capacitor	4.50	63-1744	120 ohm resistor 1/2W 10%	.17
22-5015	.047 mf capacitor - 200V		63-1747		
46-3512	Push button - AM	.35			

PART  
NO.

DESCRIPTION

PRICE

PART  
NO.

DESCRIPTION

PRICE

## CHASSIS 8LT20 Continued

63-1758	220 ohm resistor 1/2W 20% (4 req'd)	.17	83-3561	Cable retaining strip	.05
63-1785	1K ohm resistor 1/2W 10% (2 req'd)	.17	83-3674	Seven lug terminal strip	.20
63-1786	1K ohm resistor 1/2W 20% (2 req'd)	.17	83-3676	Four lug terminal strip	.10
63-1796	1800 ohm resistor 1/2W 10%	.17	83-3902	Antenna Mounting strip	
63-1806	3300 ohm resistor 1/2W 10%	.17	83-4530	Thirteen lug terminal strip	.35
63-1820	6800 ohm resistor 1/2W 10% (2 req'd)	.17	83-4533	Rubber channel strip - top & bottom (2 req'd)	.25
63-1825	9100 ohm resistor 1/2W 5%	.34	83-4534	Rubber channel strip - sides (2 req'd)	.10
63-1826	10K ohm resistor 1/2W 5%	.34	83-4535	Dial crystal retainer (2 req'd)	.50
63-1835	15K ohm resistor 1/2W 20%	.17	83-4536	Channel strip	
63-1841	22K ohm resistor 1/2W 10%	.17	83-4543	Rubber spacer (2 req'd)	.03
63-1842	22K ohm resistor 1/2W 20%	.17	85-814	Push button bandswitch	
63-1848	33K ohm resistor 1/2W 10% (2 req'd)	.17	86-312	Wire retaining terminal	.03
63-1856	47K ohm resistor 1/2W 20% (3 req'd)	.17	86-328	Wire retaining terminal (2 req'd)	.03
63-1859	56K ohm resistor 1/2W 10% (2 req'd)	.17	86-344	Connector terminal (2 req'd)	.03
63-1866	82K ohm resistor 1/2W 10%	.17	86-388	Connector terminal (2 part of S-60928)	.05
63-1869	100K ohm resistor 1/2W 10% (2 req'd)	.17	93-898	.032 x .323 x 5/8 Steel washer	.03
63-1870	100K ohm resistor 1/2W 20% (3 req'd)	.17	93-1522	Spring washer (used on S-60928)	.03
63-1880	180K ohm resistor 1/2W 10%	.17	93-1580	1/32 x .171 x .296 Steel washer	
63-1883	220K ohm resistor 1/2W 10% (2 req'd)	.17	94-1249	Shaft bushing	
63-1890	330K ohm resistor 1/2W 10%	.17	95-1915	1st I.F. transformer - A.M.	2.50
63-1911	1 megohm resistor 1/2W 10%	.17	95-1917	3rd I.F. transformer - A.M.	2.50
63-1912	1 megohm resistor 1/2W 20% (4 req'd)	.17	95-1919	2nd & 3rd I.F. transformer - F.M. (2 req'd)	.250
63-1925	2.2 megohm resistor 1/2W 10%	.17	95-1920	Ratio detector transformer	2.50
63-1926	2.2 megohm resistor 1/2W 20%	.17	95-1924	2nd I.F. transformer - A.M.	2.50
63-1940	4.7 megohm resistor 1/2W 20% (2 req'd)	.17	95-2073	Input mixer transformer	2.50
63-1954	10 megohm resistor 1/2W 20%	.17	95-2076	Doubler mixer transformer	4.50
63-4880	Potentiometer	1.40	95-2077	Detector mixer transformer	3.00
63-4896	440 ohm resistor 3W 10%	.45	95-2078	Trap coil	2.50
63-5193	22 ohm resistor - fusing type - 4W 20%	.65	95-2106	Power transformer	10.00
63-6091	3300 ohm resistor 1W 10%		100-249	Pilot light bulb	
63-6122	18K ohm resistor 1W 10%		100-275	Neon bulb & wire (part of S-60922)	
68-39	Tuning wrench	.50	103-23	Crystal diode (2 req'd)	.75
71-139	8-32 x 3/8 Phillips flat hd mach screw (8 mount 57-4373)	.03	105-42	R/C network	.50
78-402	Four contact socket	.15	105-50	R/C network (2 req'd)	.90
78-1099	Three contact socket	.20	113-8	6-32 x 1/4 x 1/4 AF Hex hd mach screw (3 used on 22-362)	.03
78-1311	Wafer socket (12BA6)	.35	113-34	6-32 x 3/8 x 1/4 AF Hex hd mach screw - external shake-proof lockwasher (2 req'd)	.03
78-1333	Noval wafer socket (6GQ7)	.35		8-18 x 1/4 x 1/4 Hex hd self-tap-statuary bronze (2 used on 12-3249)	.03
78-1360	Single pilot light socket	.25	114-26	6-20 x 5/16 x 1/4 AF Hex Hd self-tap screw - statuary bronze (3 mount 57-4372)	.05
78-1560	Wafer socket (2 req'd) - 12BA6	.35	114-77	8-18 x 7/16 x 1/4 AF Hex Hd self-tap screw - statuary bronze (4 mount S-64565)	.03
78-1561	Wafer socket (12AU6)	.35	114-390	6-32 x 1-3/8 x 1/4 AF Hex hd mach screw (used on 212-23)	.03
78-1562	Noval wafer socket (6EA8)	.35	114-393	8-18 x 5/16 Hex hd self-tap screw - flat washer attached	
78-1564	Wafer socket (12BE6)	.35	114-564	statuary bronze (2 mount S-54500 & 4 mount 95-2106)	.03
80-1140	Tension spring (pointer)	.10		6-20 x 3/8 x 1/4 Hex hd self-tap screw - statuary bronze (2 mount S-60926)	.03
80-1188	Tension spring (gang)	.10	114-654		
83-1475	Insulating strip	.03			
83-1520	Rectifier insulating strip	.05			
83-2123	Antenna terminal strip	.25			
83-2538	Three lug terminal strip	.10			
83-2612	Two lug terminal strip	.05			
83-2639	Three lug terminal strip	.05			
83-3237	Five lug terminal strip	.15			

PART NO.	DESCRIPTION	PRICE	PART NO.	DESCRIPTION	PRICE
<b>CHASSIS 8LT20 Continued</b>					
114-801	8-18 x 5/16 x 1/4 Hex hd self-tap screw - statuary bronze (1 mount 57-3519 & 4 mount each S-60927 & 12-3680)	.03	S-54156	Detector coil assembly - BC	1.25
			S-54500	Antenna assembly	2.50
			S-60575	Knob & ring assembly - tuning	2.00
114-804	8-18 x 1/2 Hex hd self-tap screw - flat washer attached - statuary bronze (4 mount S-61017)	.03	S-60922	Drive cord & eyelet assembly - pointer	.15
114-901	6-20 x 7/16 Hex hd self-tap screw - flat washer attached - statuary bronze (4 mount S-60934)	.03	S-60923	Drive cord & eyelet assembly - pointer	.15
121-302	Transistor - 2N1302		S-60926	Pulley & bracket assembly	.50
125-117	Rubber grommet (4 req'd)	.03	S-60927	riveting	.50
126-797	Tube shield (6GQ7)	.10		Escutcheon mtg bracket assembly	1.00
126-1048	Pilot light shield	.10	S-60928	Neon bulb & terminal assembly	1.50
126-1049	Hum shield	.05	S-60929	Pointer support & ring assembly (2 req'd)	.10
149-211	Iron core (1 part of each S-54155 & S-54156)	.10	S-60934	Dial scale & channel strip assembly	6.00
188-177	Retaining ring (1 used on 94-1249 & 1 part of S-60575)	.03	S-61017	F.M. Tuner assembly (see F.M. tuner parts list for components)	30.00
188-322	Retaining ring (1 part of each S-60929)	.03	S-62551	Drive cord & eyelet assembly (gang)	.15
192-319	Dial crystal		S-62552	Drive cord & eyelet assembly (gang)	.15
199-183	Shielded paper sleeve		S-64565	Trim plate & escutcheon assembly	
212-23	Selenium rectifier				
S-54155	Oscillator coil assembly - BC	1.25			

## CHASSIS 8LT25Z

22-17	.001 mfd disc capacitor - 1000V (2 req'd)	.25	63-1806	3300 ohm resistor - 1/2W 10% (2 req'd)	.17
22-1840	.033 mfd disc capacitor - 200V (2 req'd)	.35	63-1827	10K ohm resistor - 1/2W 10%	.17
			63-1859	56K ohm resistor - 1/2W 10% (2 req'd)	.17
22-2655	.01 mfd capacitor - 1400V	.50	63-1912	1 megohm resistor - 1/2W 20%	.17
22-3135	.1 mfd capacitor - 400V	.35	63-4851	125 ohm resistor - 5W 10%	.75
22-3180	2200 mmf mica capacitor - 300V (2 req'd)	.75	63-5001	1650 ohm resistor - 10W 10%	.90
22-3616	1 mfd electrolytic capacitor - 50V	1.00	63-5190	2.2 ohm resistor - 1W 5% (4 req'd)	.25
22-3878	2000 mfd electrolytic capacitor	6.50	63-5217	2 ohm resistor - 10W 10%	.80
22-3879	1000 mfd electrolytic capacitor	3.50	63-5222	130 ohm resistor - 5W 5%	.75
22-3880	Three section electrolytic capacitor	4.00	63-5282	.39 ohm resistor - 5W 5%	.75
22-3881	1500 mfd electrolytic capacitor (2 req'd)	5.00	63-5599	22 ohm resistor - 2W 20%	.34
22-3882	Two section electrolytic capacitor	3.50	63-5635	150 ohm resistor - 2W 10% (2 req'd)	.34
22-3883	50 mfd electrolytic capacitor (3 req'd)	1.25	63-5641	220 ohm resistor - 2W 10% (2 req'd)	.34
43-333	Three contact housing (male)	.20	63-5645	270 ohm resistor - 2W 10% (2 req'd)	.34
43-573	Six contact housing (female)	.45	63-5656	470 ohm resistor - 2W 10% (2 req'd)	.34
43-574	Nine contact housing (female)	.35	78-402	Four contact socket	.15
54-385	6-32 x 5/16 Hex nut (used on 114-393)	.03	78-1223	Three contact transistor socket (2 req'd)	.35
54-579	10-32 x 3/8 x 3/16 Hex nut (1 used on each 212-40)	.03	78-1347	Electrolytic socket (5 req'd)	.10
62-300	Fuse holder		78-1568	Two contact transistor socket (6 req'd)	.35
63-1747	120 ohm resistor - 1/2W 10% (2 req'd)	.17	83-1520	Rectifier insulating strip (used on 212-39)	.05
63-1764	330 ohm resistor - 1/2W 10%	.17	83-3265	Five lug terminal strip (5 req'd)	.10
63-1785	1000 ohm resistor - 1/2W 10% (3 req'd)	.17	83-3881	Four lug terminal strip	.20
63-1799	2200 ohm resistor - 1/2W 10% (3 req'd)	.17	83-4237	Seven lug terminal strip	.15
63-1803	2700 ohm resistor - 1/2W 10% (2 req'd)	.17	83-4523	Insulating strip - transistors (6 req'd)	.05

PART  
NO.

DESCRIPTION

PRICE

PART  
NO.

DESCRIPTION

PRICE

CHASSIS 8LT25Z **Continued**

83-4633	Felt strip		114-393	6-32 x 1-3/8" x 1/4 Hex hd mach screw (used on 212-39)	.03
86-303	Male terminal (2 req'd)	.04	114-699	10-16 x 3/8 Hex washer hd self-tap screw (4 used on 95-2107)	.03
86-328	Wire retaining terminal (2 req'd)	.03	114-801	8-18 x 5/16 x 1/4 Hex hd self-tap screw (4 used on each S-61233)	.03
86-389	Female terminal (15 req'd)	.03			
93-166	#6 internal shakeproof lockwasher				
	#1206 (used on 114-393)	.03			
93-369	#10 internal shakeproof lockwasher #1210 (1 used on each 212-40)	.03	121-270	Transistor (power) (4 req'd)	6.66
95-2107	Power transformer		121-271	Transistor (driver) (2 req'd)	2.54
95-2108	Driver transformer (2 req'd)	3.25	121-272	Transistor (pre-driver) (2 req'd)	
113-156	6-32 x 9/16 Phillips pan hd mach screw - internal lockwasher attached (2 used on each 121-270 & 121-271)	.03	136-61	Fuse - 4 amp	.35
			212-39	Selenium rectifier	2.00
			212-40	Silicon rectifier (2 req'd)	2.50
			S-61233	Heat sync assembly	4.00

## CHASSIS 9L20

12-3249	Variable capacitor mounting bracket	.05	54-549	Tinnerman speed nut (2 used on 192-319)	.03
12-3892	Escutcheon mounting bracket (R.H.)		57-3519	Antenna mounting plate	.10
19-306	Coil mounting clip (2 req'd)	.10	57-4372	Dial scale background plate	
19-440	Dial crystal retaining clip (2 req'd)		57-4373	Chassis bottom plate	
19-446	Dial scale retaining clip		57-4374	Trim plate	
22-3	.01 mfd disc capacitor 500V (10 req'd)	.25	57-4380	Die-cast escutcheon	
22-5	100 mmfd disc capacitor 500V	.25	58-238	Three prong plug (used on 52-978)	.10
22-7	.001 mfd disc capacitor 500V		59-547	Dial pointer	
22-13	.0033 mfd disc capacitor 500V	.25	63-1736	68 ohm resistor 1/2W 10% (2 req'd)	.17
22-18	.0022 mfd disc capacitor 500V	.25	63-1744	100 ohm resistor 1/2W 20% (2 req'd)	.17
22-27	.0025 mfd disc capacitor 500V	.25	63-1747	120 ohm resistor 1/2W 10%	.17
22-1778	.047 mfd capacitor 200V (2 req'd)	.30	63-1758	220 ohm resistor 1/2W 20% (4 req'd)	.17
22-2370	50 mmfd disc capacitor 500V	.25	63-1785	1000 ohm resistor 1/2W 10% (2 req'd)	.17
22-2655	.01 mfd capacitor 1400V	.50		1000 ohm resistor 1/2W 20% (2 req'd)	.17
22-2939	680 mmfd disc capacitor 500V	.25	63-1786	1500 ohm resistor 1/2W 10%	.17
22-3140	270 mmfd disc capacitor 500V (2 req'd)	.30	63-1792	2700 ohm resistor 1/2W 10%	.17
22-3177	390 mmfd disc capacitor 500V (2 req'd)	.25	63-1803	3300 Ohm resistor 1/2W 10% (2 req'd)	.17
22-3255	330 mmfd disc capacitor 500V (3 req'd)	.25	63-1806	6800 ohm resistor 1/2W 10% (2 req'd)	.17
22-3537	.047 mfd capacitor 200V	.30	63-1820	8200 ohm resistor 1/2W 10% (2 req'd)	.17
22-3616	1.0 mfd electrolytic capacitor 50V	1.00	63-1824	12K ohm resistor 1/2W 10%	.17
22-3618	10 mfd electrolytic capacitor 50V	1.25	63-1831	15K ohm resistor 1/2W 10%	.17
22-3626	.22 mfd capacitor 100V (2 req'd)	.50	63-1834	15K ohm resistor 1/2W 20%	.17
22-3636	Electrolytic capacitor 150V	3.00	63-1835	22K ohm resistor 1/2W 20%	.17
22-3862	Three section variable capacitor		63-1842	47K ohm resistor 1/2W 10% (2 req'd)	.17
46-3512	Push button AM		63-1855	47K ohm resistor 1/2W 20% (2 req'd)	.17
46-3513	Push button FM		63-1856	56K ohm resistor 1/2W 10% (2 req'd)	.17
46-3514	Push button FM - AFC			82K ohm resistor 1/2W 10% (2 req'd)	.17
46-3515	Push button - phono			100K ohm resistor 1/2W 10% (2 req'd)	.17
46-3516	Push button - off		63-1859	100K ohm resistor 1/2W 20% (3 req'd)	.17
52-978	Two conductor shielded lead	.75			
52-1098	Three conductor cable & plug		63-1866		
54-12	6-32 x 5/16 Hex nut (used on 212-23)	.03	63-1869		
54-504	Tinnerman speed nut (used on S-60934)	.03	63-1870		
54-541	Palnut (1 used on ea. 19-440 & 2 used on ea. 83-4535)	.03			

PART  
NO.

DESCRIPTION

PRICE

PART  
NO.

DESCRIPTION

PRICE

## CHASSIS 9L20 Continued

63-12880	180K ohm resistor 1/2W 10% (2 req'd)	.17	94-812	Coil insert (1 part of ea S-54155 & S-54156)	.05
63-12883	220K ohm resistor 1/2W 10%	.17	94-1249	Shaft bushing	
63-12890	330K ohm resistor 1/2W 10%	.17	95-1915	1st I.F. transformer (AM)	2.50
63-12911	1 megohm resistor 1/2W 10%	.17	95-1917	3rd I.F. transformer (AM)	2.50
63-12912	1 megohm resistor 1/2W 20% (4 req'd)	.17	95-1919	2nd & 3rd I.F. transformer (FM) (2 req'd)	2.50
63-12915	1.2 megohm resistor 1/2W 10%	.17	95-1920	Ratio detector transformer	2.50
63-12925	2.2 megohm resistor 1/2W 10%	.17	95-1924	2nd I.F. transformer (AM)	2.50
63-12926	2.2 megohm resistor 1/2W 20%	.17	95-2073	Input mixer transformer	
63-12940	4.7 megohm resistor 1/2W 20% (2 req'd)	.17	95-2078	Trap coil	
63-12954	10 megohm resistor 1/2W 20%	.17	95-2075	Detector mixer transformer	
63-42880	Potentiometer	1.40	95-2106	Doubler mixer transformer	
63-42896	440 ohm resistor 3W 10%	.45	100-249	Power transformer	
63-51193	22 ohm resistor - fusing type 4W 20%	.65	100-275	Pilot light bulb	.18
63-60091	3300 ohm resistor 1W 10%		103-23	Neon bulb & wire	
63-61129	27K ohm resistor 1W 10%		105-42	Crystal diode (2 req'd)	.75
64-831	Brass eyelet (1 used on 114-804)	.03	105-50	R/C network	.50
68-39	Tuning wrench	.50	113-8	R/C network (2 req'd)	.90
71-139	8-32 x 3/8 Phillips flat hd mach screw - statuary bronze - (8 mt. 57-4373)	.03	113-34	6-32 x 1/4 x 1/4 Hex hd mach screw (internal shakeproof lockwasher - (3 used on 22-3862)	.03
78-402	Four contact socket	.15		6-32 x 3/8 x 1/4 Hex hd mach screw - internal shakeproof lockwasher (2 mt 85-783)	.03
78-1099	Three contact socket	.20	114-26	8-18 x 1/4 x 1/4 Hex hd self- tapping screw - statuary bronze	
78-1311	Wafer socket (12BA6-V6)		114-77	(2 used on 12-3249)	.03
78-1333	Noval wafer socket (6GQ7)			6-20 x 5/16 x 1/4 Hex hd self- tapping screw - statuary bronze	
78-1360	Single pilot light socket			- (3 used on 57-4372)	.03
78-1560	Wafer socket (12BA6-V2 & V3) (2 req'd)		114-390	8-18 x 7/16 x 1/4 Hex hd self- tapping screw - statuary bronze - (4 used on 57-4380)	.03
78-1561	Wafer socket (12AU6)		114-393	6-32 x 1-3/8 x 1/4 Hex hd mach screw (used on 212-23)	.03
78-1562	Noval wafer socket (6EA8)		114-564	8-18 x 5/16 Hex hd self-tapping screw - flatwasher attached	
78-1563	Noval wafer socket (6BN8)		114-654	statuary bronze (2 used on S-54500 & 4 used on 95-2106)	.03
78-1564	Wafer Socket (12BE6)		114-801	6-20 x 3/8 x 1/4 Hex hd self- tapping screw - statuary-bronze (2 used on S-60926)	.03
80-1140	Tension spring (pointer)	.10	114-804	8-18 x 5/16 x 1/4 Hex hd self- tapping screw - statuary bronze (1 used on 57-3519, 4 used on ea S-60917 and 12-3680)	.03
80-1188	Tension spring (gang)	.10	114-901	8-18 x 1/2 Hex hd self-tapping screw - flatwasher attached -	
83-1475	Insulating strip	.03		statuary bronze - (4 used on S-61017)	.03
83-1520	Rectifier insulating strip	.05		6-20 x 7/16 Hex hd self-tapping screw - flatwasher attached	
83-2123	Antenna terminal strip	.25		statuary bronze (4 used on S-60934)	
83-2538	Three lug terminal strip	.10	125-117	Rubber grommet (1 used on ea 64-831)	.03
83-2612	Two lug terminal strip	.05	126-797	Tube shield (6GQ7)	.10
83-2639	Three lug terminal strip	.05	126-1048	Pilot light shield	
83-3561	Cable retaining strip	.05	126-1049	Hum shield	
83-3574	Seven lug terminal strip	.20	149-211	Iron core (1 used on ea S-54155 & S-54156)	
83-3576	Four lug terminal strip	.10	188-177	Retaining ring (1 used on ea 94-1249 & S-60575)	.10
83-4530	Thirteen lug terminal strip				
83-4533	Rubber channel strip (top & bottom) (2 req'd)				
83-4534	Rubber channel strip (sides) (2 req'd)				
83-4535	Dial crystal retainer (2 req'd)				
83-4543	Rubber spacer (2 req'd)				
85-783	Push button bandswitch				
86-312	Wire retaining terminal	.03			
86-328	Wire retaining terminal (2 req'd)	.03			
86-344	Connector terminal (2 part of S-54774)	.03			
86-388	Connector terminal (2 req'd)				
93-127	#1210 internal shakeproof lockwasher (2 req'd)				
93-898	Steel washer (used on S-60928)	.03			
93-1522	Spring washer	.03			
93-1580	1/32 x .171 x .296 steel washer black oxide				

PART NO.	DESCRIPTION	PRICE	PART NO.	DESCRIPTION	PRICE
<b>CHASSIS 9L20 Continued</b>					
188-322	Retaining ring (1 used on ea S-60929)	.03	S-60926	Pulley & bracket assembly	
192-319	Dial crystal		S-60927	Escutcheon mounting bracket assembly	
212-23	Selenium rectifier	1.80	S-60928	Neon bulb & terminal assembly	
S-54155	Oscillator coil assembly (BC)	1.25	S-60929	Pointer support & ring assembly	
S-54156	Detector coil assembly (BC)	1.25	S-60934	Dial scale & channel strip assbly	
S-54500	Antenna assembly	2.50	S-61017	FM tuner assembly	
S-54774	Antenna cable & terminal assbly	.25	S-62551	Drive cord & eyelet assembly	
S-60575	Knob & ring assembly (tuning)			(gang) - 18-1/2"	
S-60922	Drive cord & eyelet assembly (pointer) - 24-1/2"		S-62552	Drive cord & eyelet assembly (gang) - 10-1/16"	
S-60923	Drive cord & eyelet assembly (pointer) - 32-1/4"		S-64565	Trim plate & escutcheon assembly	

### MLT-15 Drop-In-Tuner Parts

13-20	Tack strip (part of S-61876)	.03	102-9447	Tube layout & patent label	
16-2504	Packing carton		114-910	8-18 x 7/16 Slotted hex hd self-tapping screw - flatwasher attached	
70-165	#6 x 3/8 rd hd wood screw (2 part of S-61876)	.03		- statuary bronze - (4 part of S-61876)	
83-3801	Felt strip (6 req'd)	.03		FM Instruction book	.20
86-323	Spade terminal	.03	202-1833	Instruction book	
93-1579	Rubber washer (4 part of S-61876)		202-2304	Accessories kit	
			S-61876		

### CHASSIS 10L02

12-3385	Tuner bracket	.40	22-3577	.1 mfd capacitor - 600V	.40
12-3799	Coil support bracket	.25	22-3621	22 mmfd disc capacitor - 50-0V (used on S-62889)	.25
12-3842	Antenna mounting bracket (2 req'd)			.22 mfd capacitor - 100V (2 req'd)	.50
17-181	Cable clamp	.03	22-3626	.047 mfd capacitor - 100V (2 req'd)	.35
19-238	Coil mounting clip (1 part of each S-52632 & S-50127)	.10	22-3627	1000 mfd mica capacitor - 1 00V (2 req'd)	.75
19-322	Coil mounting clip (2 req'd)	.05	22-3645	10 mmfd disc capacitor - 50-0V (used on S-62889)	.25
22-3	.01 mfd disc capacitor - 500V (11 req'd)	.30	22-3675	1 mfd capacitor - 100V	.35
22-5	100 mmfd disc capacitor - 500V (2 req'd)	.25	22-3694	2 mmfd disc capacitor - 500V	.25
22-9	100 mmfd disc capacitor - 500V	.25	22-3774	Variable capacitor	3.75
22-13	.0033 mfd disc capacitor - 500V (3 req'd)	.25	22-3809	Dual electrolytic capacitor	2.25
22-14	.0047 mfd disc capacitor - 500V (5 req'd)	.25	22-3859	26 mmfd disc capacitor - 50-0V (used on S-62887)	.25
22-16	470 mmfd disc capacitor - 500V	.25	22-3971	Electrolytic capacitor	
22-17	.001 mfd disc capacitor - 1000V	.25	22-5013	Electrolytic capacitor	
22-18	.0022 mfd disc capacitor - 500V (3 req'd)	.25	24-1068	Tuner cover	.50
22-1813	.022 mfd capacitor - 600V (2 req'd)	.30	26-877	Dial scale	
22-1852	7.5 mmfd ceramic capacitor - 500V	.25	43-519	Socket contact housing (used on 52-996)	.20
22-1888	.001 mfd ceramic capacitor - 500V (used on S-62887)	.25	44-46	Dual connector jack (part of S-59722)	.20
22-2524	470 mmfd mica capacitor - 500V (2 req'd)	.25	52-996	Four conductor cable	.65
22-2569	.047 mfd capacitor - 600V (2 req'd)	.40	54-139	3/8-32 x 9/16 Walnut (1 used on each 63-5232, 85-803, 63-5234 & 63-5235)	.03
22-2655	.01 mfd disc capacitor - 1400V	.50	56-426	Roll pin (4 used on 76-1399)	.05
22-2732	Feed thru capacitor - 500V (5 req'd)	.30	56-512	Roll pin (2 used on 76-1418)	.03
22-3318	.001 mfd disc capacitor - 25V	.25	57-4644	Dial background plate	
22-3366	1000 mmfd mica capacitor - 500V	.40	58-209	A.C. plug (part of S-63816)	.35
22-3456	2 x 12 mmfd disc capacitor - 500V (used on S-62889)	.30	58-214	Single prong plug (2 part of S-54511)	.10

PART  
NO.

## DESCRIPTION

## PRICE

PART  
NO.

## DESCRIPTION

## PRICE

## CHASSIS 10L02 Continued

59-614	Dial pointer		78-1365	Noval wafer socket (12DT8)	
63-1 744	100 ohm resistor - 1/2W 20% (3 req'd)	.17	78-1562	Noval wafer socket (12AX7A)	.35
63-1 772	470 ohm resistor - 1/2W 20% (2 req'd)	.17	80-1188	Tension spring (gang)	.10
63-1 779	680 ohm resistor - 1/2W 20% (2 req'd)	.17	80-1467	Retaining spring	.05
63-1 786	1K ohm resistor - 1/2W 20% (3 req'd)	.17	80-1468	Grounding spring	.05
63-1 799	2200 ohm resistor - 1/2W 10% (2 req'd)	.17	80-1718	Tension spring (pointer)	.15
63-1 807	3300 ohm resistor - 1/2W 20%	.17	83-1475	Insulating strip	.03
63-1 824	8200 ohm resistor - 1/2W 10%	.17	83-1635	Insulating strip (1 used on each 63-5232 & 85-803)	.03
63-1 835	15K ohm resistor - 1/2W 20%	.17	83-2963	Four lug terminal strip	.10
63-1 841	22K ohm resistor - 1/2W 10%	.17	83-3265	Five lug terminal strip	.10
63-1 842	22K ohm resistor - 1/2W 20%	.17	83-3670	Six lug terminal strip	.15
63-1 852	39K ohm resistor - 1/2W 10%	.17	83-3671	Five lug terminal strip	.15
63-1 855	47K ohm resistor - 1/2W 10% (3 req'd)	.17	83-3674	Seven lug terminal strip (2 req'd)	.20
63-1 856	47K ohm resistor - 1/2W 20% (4 req'd)	.17	83-3676	Four lug terminal strip (3 req'd)	.10
63-1 859	56K ohm resistor - 1/2W 10% (used on S-62889)	.17	83-3889	Single lug terminal strip	.05
63-1 866	82K ohm resistor - 1/2W 10% (2 req'd)	.17	83-4764	Six lug terminal strip (part of S-63816)	.20
63-1 869	100K ohm resistor - 1/2W 10% (6 req'd)	.17	85-803	Bandswitch	
63-1 880	180K ohm resistor - 1/2W 10% (2 req'd)	.17	86-255	Spade terminal	.03
63-1 883	220K ohm resistor - 1/2W 10% (2 req'd)	.17	86-312	Terminal	.03
63-1 891	330K ohm resistor - 1/2W 20% (2 req'd)	.17	86-328	Wire retaining terminal (2 req'd)	.03
63-1 894	390K ohm resistor - 1/2W 10% (2 req'd)	.17	86-334	Socket terminal (4 used on 52-996)	.10
63-1 897	470K ohm resistor - 1/2W 10%	.17	86-376	Terminal & screw (2 used on S-63474)	
63-1 912	1 Megohm resistor - 1/2W 20% (6 req'd)	.17	90-665	Spacer (2 used on S-59722)	
63-1 926	2.2 Megohm resistor - 1/2W 20% (4 req'd)	.17	90-667	Spacer (2 used on 22-3809)	
63-1 939	4.7 Megohm resistor - 1/2W 10%	.17	93-993	Bakelite washer (1 used on each 63-5232 & 85-803)	.03
63-1 940	4.7 Megohm resistor - 1/2W 20%	.17	93-1183	Fibre washer (2 used on 78-1156)	.03
63-1 954	10 Megohm resistor - 1/2W 20%	.17	94-613	Iron core bushing (2 req'd)	.10
63-3 983	33 ohm resistor - 5W 10%	.75	94-812	Coil insert (part of S-50127)	.05
63-4 199	2200 ohm Resistor - 1/4W 10%	.17	94-1274	Nylon bushing (used on S-63816)	
63-4 828	130 ohm resistor - 4W 10%	.65	95-1505	2nd IF transformer - AM	2.50
63-4 880	Potentio meter	1.40	95-1718	1st IF transformer - AM	2.50
63-5 232	Dual loudness control		95-1866	Discriminator transformer	2.50
63-5 234	Dual bass tone control		95-1919	Limiter & 2nd IF transformer - FM	
63-5 235	Dual treble tone control		95-2073	(2 req'd)	2.50
63-5 243	Fusing type resistor	.50	95-2076	Input coil	2.50
63-5 245	110 ohm resistor - 3W 10%	.45	95-2077	Doubler coil	4.50
63-5 655	470 ohm resistor - 2W 20%		95-2078	Detector coil	3.00
63-6 007	33 ohm resistor - 1W 10% (2 req'd)		95-2120	Trap coil	2.50
63-6 052	390 ohm resistor - 1W 10% (2 req'd)		95-2143	1st IF transformer - FM	
76-1 141	Guide shaft	.10	97-607	Audio output transformer (2 req'd)	
76-1 399	Extension shaft - tuners	.25	103-23	Chassis mounting stud (4 req'd)	.10
76-1 418	Drive shaft - tuner		103-34	Crystal diode (2 req'd)	.75
78-1 156	Molded socket (7695) (2 req'd)	.25	103-47	Crystal diode (2 req'd)	1.35
78-1 314	Wafer socket (12AW6-12BA6) (3 req'd)		105-42	Silicon diode	3.75
78-1 319	Noval wafer socket (19EA8-19GQ7) (2 req'd)		113-26	R/C network	.50
78-1 357	Wafer socket (12BE6)	.35	113-31	6-32 x 1/4 x 1/4 Hex hd mach screw (external lockwasher)(2 used on S-63739)	.03
			114-26	6-32 x 3/4 x 1/4 Hex hd mach screw (internal lockwasher)(2 used on S-63810)	
			114-352	8-18 x 1/4 x 1/4 Hex hd self-tap- screw stat bronze (2 used on 126-1074)	.03
			114-594	6-20 x 7/8 x 1/4 Hex hd self-tap- screw stat bronze (2 used on S-59722)	
				8-18 x 3/8 Hex hd self-tap-screw flat washer attached stat bronze (2 used on S-63474)	.03

PART NO.	DESCRIPTION	PRICE	PART NO.	DESCRIPTION	PRICE
<b>CHASSIS 10L02 Continued</b>					
114-801	8-18 x 5/16 x 1/4 Hex hd self-tap-screw stat bronze (2 used on each S-63814, S-63815, S-63816, 12-3842, 95-2143 & 4 used on 57-4644)	.03	S-54511	Shielded leak & plug assembly	1.25
125-26	Rubber grommet (4 used on 78-1156)	.03	S-59541	Drive cord & eyelet assembly	.15
126-937	Tube shield & base	.10	S-59543	Drive cord & eyelet assembly	.15
126-1065	Shield		S-59722	Connector jack & mounting strip assembly	.40
126-1074	Chassis heat shield		S-61711	Pointer support strip & ring assembly (4 req'd)	.10
149-211	Iron core (part of S-50127)	.10	S-62887	Detector coil assembly - FM	
149-335	Iron core & spring	.25	S-62889	Oscillator coil assembly - FM	
149-336	Iron core & spring		S-63474	Wavemagnet assembly	
188-232	Retaining ring (6 req'd)	.03	S-63814	Bracket & pulley assembly - LH	
199-396	Shielded paper sleeve		S-63815	Bracket & pulley assembly - RH	
212-27	Silicon rectifier	2.00	S-63816	AC plug mounting bracket assembly	
S-50127	AM oscillator coil	1.25	S-63834	Drive cord & eyelet assembly (pointer)	
S-52362	FM antenna coil assembly	.60	S-63835	Drive cord & eyelet assembly	

## CHASSIS 10LT20

22-14	.0047 mfd disc capacitor (4 req'd) 500V	.25	63-4529	4.7 ohm resistor 1/2W 10% (4 req'd)	.17
22-2655	.01 mfd disc capacitor - 1400V	.50	63-5209	Dual loudness control	
22-2728	.05 mfd disc capacitor - 25V (2 req'd)	.55	63-5210	Dual bass control & switch	
22-3442	.47 mfd capacitor - 50V (2 req'd)		63-5211	Dual treble control	
22-3595	.33 mfd capacitor - 50V (2 req'd)	.60	63-5586	10 ohm resistor 2W 10%	
22-3626	.22 mfd capacitor - 100V (2 req'd)	.50	63-6063	680 ohm resistor 1W 10%	
22-3678	.047 mfd capacitor - 100V (2 req'd)		63-6080	1800 ohm resistor 1W 10% (2 req'd)	
22-3694	.1 mfd capacitor - 100V (2 req'd)	.35	78-402	Four contact socket	.15
22-3763	.01 mfd capacitor - 200V (2 req'd)	.30	78-1099	Three contact socket	.20
22-3826	.022 mfd capacitor - 100V (2 req'd)	.30	78-1233	Three contact transistor socket (6 req'd)	
22-3896	5 mfd electrolytic capacitor 25V (8 req'd)	1.00	83-1475	Insulating strip	.35
22-3956	.0082 mfd disc capacitor - 100V (2 req'd)		83-3575	Fuse holder	.03
22-3972	Three section electrolytic capacitor 80/100V 40/100V 250/50V		83-3670	Six lug terminal strip	.25
22-3973	100 mfd electrolytic capacitor 25V (2 req'd)		83-3671	Five lug terminal strip (2 req'd)	
54-139	3/8-32 x 9/16 Palnut-cadmium (1mts each 63-5209, 63-5210 & 63-5211)	.03	83-3672	Eight lug terminal strip	
54-579	10-32 x 3/8 x 3/16 thick hex nut-cadmium (1 used on each 121-279)	.03	83-3674	Seven lug terminal strip	
57-4598	Heat sink plate		83-4203	Three lug terminal strip	
58-246	Two prong plug (AC) (part of S-59959)	.25	83-4342	Eleven lug terminal strip	.25
63-1715	22 ohm resistor 1/2W 10% (4 req'd)	.17	83-4702	Insulating strip (transistor)	
63-1733	56 ohm resistor 1/2W 10% (2 req'd)	.17	83-4704	Insulator strip (long)	
63-1764	330 ohm resistor 1/2W 10% (2 req'd)	.17	83-4714	Fourteen lug terminal strip	
63-1782	820 ohm resistor 1/2W 10%	.17	83-4801	Fuse insulating strip & label	
63-1785	1K ohm resistor 1/2W 10% (2 req'd)	.17	90-665	Spacer sleeve (2 req'd)	
63-1792	1500 ohm resistor 1/2W 10% (2 req'd)	.17	93-369	#10 Internal shakeproof lockwasher (1 used on each 121-279)	
63-1799	2200 ohm resistor 1/2W 10% (2 req'd)	.17	94-1271	Insulator bushing (1 used on each 121-279)	
63-1803	2700 ohm resistor 1/2W 10% (4 req'd)	.17	95-2131	Transformer-output (2 req'd)	
63-1810	3900 ohm resistor 1/2W 10% (2 req'd)	.17	95-2132	Transformer-driver (2 req'd)	
63-1817	5600 ohm resistor 1/2W 10% (2 req'd)	.17	95-2133	Power transformer	
63-1824	8200 ohm resistor 1/2W 10% (4 req'd)	.17	114-699	10-16 x 3/8 Hex washer hd self-tapping screw statuary bronze (4 mt 95-2133)	
63-1841	22K ohm resistor 1/2W 10% (5 req'd)	.17	114-791	6-20 x 3/4 Hex washer hd self-tapping screw statuary bronze (2 req'd)	
63-1862	68K ohm resistor 1/2W 10% (2 req'd)	.17	114-801	8-18 x 5/16 x 1/4 AF hex hd self-tapping screw statuary bronze (2 mt each 95-2131 & 95-2132)	
63-1869	100K ohm resistor 1/2W 10% (6 req'd)	.17	121-276	Transistor - amplifier (2 req'd)	
63-1873	120K ohm resistor 1/2W 10% (2 req'd)	.17	121-277	Transistor - pre-amp (2 req'd)	

PART  
NO.

DESCRIPTION

PRICE

PART  
NO.

DESCRIPTION

PRICE

## CHASSIS 10LT20 Continued

121-278	Transistor - driver (2 req'd)		159-139	Plug button (4 mt 83-4702)	
121-279	Transistor - output (4 req'd)		212-42	Silicon rectifier (2 req'd)	
136-36	Fuse - 2 amp	.10	S-59959	AC plug & bracket assembly	.40

## CHASSIS 10L22

12-3195	Coil support bracket	.15	57-3519	Antenna mtg plate	.10
12-3249	Variable capacitor mtg bracket	.05	57-4373	Chassis bottom plate	1.00
12-3884	Chassis mtg bracket (LH)		59-622	Dial pointer	
12-3888	Dial background bracket		63-1736	68 ohm resistor - 1/2W 10% (2 req'd)	.17
19-306	Coil mounting clip (2 req'd)	.10	63-1743	100 ohm resistor - 1/2W 10%	
22-2	220 mmfd disc capacitor - 500V (2 req'd)	.25	63-1744	(2 req'd)	.17
22-3	.01 mfd disc capacitor - 500V (12 req'd)	.30	63-1747	100 ohm resistor - 1/2W 20%	
22-5	100 mmfd disc capacitor - 500V	.25	63-1758	(2 req'd)	.17
22-7	.001 mfd disc capacitor - 500V	.26		120 ohm resistor - 1/2W 10%	.17
22-9	100 mmfd disc capacitor - 500V (2 req'd)	.25	63-1778	220 ohm resistor - 1/2W 20%	
22-13	.0033 mfd disc capacitor - 500V (2 req'd)	.25	63-1785	(4 req'd)	.17
22-18	.0022 mfd disc capacitor - 500V (2 req'd)	.25	63-1786	680 ohm resistor - 1/2W 10%	.17
22-26	2 x .0015 mfd disc capacitor	.40	63-1792	1000 ohm resistor - 1/2W 10%	
22-27	.0025 mfd disc capacitor	.25	63-1803	(2 req'd)	.17
22-1778	.047 mfd capacitor - 200V (2 req'd)	.30	63-1806	1000 ohm resistor - 1/2W 20%	
22-1888	.001 mf ceramic capacitor	.25	63-1820	1500 ohm resistor - 1/2W 10%	.17
22-2370	50 mmfd disc capacitor	.25		2700 ohm resistor - 1/2W 10%	.17
22-2374	6 pf disc capacitor	.25	63-1824	3300 ohm resistor - 1/2W 10%	
22-2550	30 pf disc capacitor	.25	63-1831	(4 req'd)	.17
22-2676	0.51 pf gimmick capacitor	.40	63-1834	6800 ohm resistor - 1/2W 10%	
22-2732	1000 pf feed thru capacitor (5 req'd)	.30	63-1835	(2 req'd)	.17
22-2883	Electrolytic capacitor - 50 mfd 12V	1.10	63-1842	8200 ohm resistor - 1/2W 10%	
22-2896	16 pf disc capacitor	.25	63-1845	12K ohm resistor - 1/2W 10%	.17
22-2939	680 mmfd disc capacitor	.25	63-1852	15K ohm resistor - 1/2W 10%	
22-3010	.01 mf disc capacitor	.45	63-1855	15K ohm resistor - 1/2W 20%	
22-3140	270 mmfd disc capacitor (2 req'd)	.30	63-1856	(3 req'd)	.17
22-3177	390 mmfd disc capacitor (2 req'd)	.25	63-1859	56K ohm resistor - 1/2W 10%	
22-3232	25 pf disc capacitor	.25	63-1866	(2 req'd)	.17
22-3255	330 mmfd disc capacitor (3 req'd)	.25		82K ohm resistor - 1/2W 10%	
22-3270	22 pf feed thru capacitor (2 req'd)	.25	63-1869	(2 req'd)	.17
22-3456	2 x 12 pf disc capacitor	.30	63-1870	100K ohm resistor - 1/2W 10%	
22-3537	.047 mfd capacitor - 200V	.30	63-1880	(3 req'd)	.17
22-3616	Electrolytic capacitor - 1 mfd - 50V	1.00	63-1883	100K ohm resistor - 1/2W 20%	
22-3618	Electrolytic capacitor - 10 mfd - 50V	1.25	63-1887	(4 req'd)	.17
22-3621	22 pf disc capacitor	.25	63-1890	180K ohm resistor - 1/2W 10%	
22-3626	.22 mfd capacitor - 100V (2 req'd)	.50	63-1892	(2 req'd)	.17
22-3694	.1 mfd capacitor - 100V (2 req'd)	.35	63-1897	220K ohm resistor - 1/2W 10%	
22-3862	Three variable capacitor	4.50	63-1898	(5 req'd)	.17
22-3884	.022 mfd capacitor - 400V (2 req'd)	.35	63-1911	270K ohm resistor - 1/2W 10%	
22-3996	Electrolytic capacitor		63-1912	(2 req'd)	.17
43-574	Housing	.35	63-1915	330K ohm resistor - 1/2W 10%	
52-996	Four conductor cable	.65	63-1925	(3 req'd)	.17
52-1113	Two conductor shielded cable (used on S-64619)		63-1926	1 megohm resistor - 1/2W 10%	.17
52-1114	Two conductor shielded cable (used on S-64619)			1 megohm resistor - 1/2W 20%	
54-139	3/8-32 x 9/16 Hex palnut (4 req'd)	.03		(4 req'd)	.17
56-426	Roll pin (6 part of S-64796)	.05		1.2 megohm resistor - 1/2W 10%	
				(2 req'd)	.17
				2.2 megohm resistor - 1/2W 10%	
				2.2 megohm resistor - 1/2W 20%	.17

PART NO.	DESCRIPTION	PRICE	PART NO.	DESCRIPTION	PRICE
<b>CHASSIS 10L22 Continued</b>					
63-1933	3.3 megohm resistor - 1/2W 20% (2 req'd)	.17	95-1920	Ratio detector transformer (EM)	2.50
63-1939	4.7 megohm resistor - 1/2W 10%	.17	95-1924	2nd IF transformer (AM)	2.50
63-1940	4.7 megohm resistor - 1/2W 20% (2 req'd)	.17	95-2073	Input mixer transformer (FM)	2.50
63-1954	10 megohm resistor - 1/2W 20%	.17	95-2075	Detector mixer transformer	2.50
63-4880	Potentiometer	1.40	95-2076	Doubler mixer transformer	4.50
63-5268	Loudness control		95-2078	Trap coil	2.50
63-5269	Bass control		100-325	Neon bulb & wire	
63-5270	Treble control		103-23	Diode (2 req'd)	.75
63-5272	1250 ohm resistor - 10W 10% (2 req'd)		103-47	Silicon diode	3.75
63-5273	4000 ohm resistor - 7W 10%		103-39	Silicon diode	3.00
63-6091	3300 ohm resistor - 1W 10%		105-42	R/C network	.50
63-6129	27K ohm resistor - 1W 10%		105-50	R/C network (2 req'd)	.90
71-139	8-18 x 3/8 Phillips flat hd mach screw stat bronze (8 used on 57-4373)	.03	113-8	6-32 x 1/4 x 1/4 Hex hd mach screw (internal lockwasher attached) (1 joins S-61122 & 83-4125 and 2 used on S-61122)	.03
76-1154	Guide shaft	.35	113-26	6-32 x 1/4 x 1/4 Hex hd mach screw (external lockwasher attached) (2 used on S-5320)	.03
76-1167	Guide shaft	.30	114-77	6-20 x 5/16 x 1/4 Hex hd self-top-screw stat bronze (2 used on 12-3249)	.03
76-1452	Drive shaft (part of S-64796)		114-564	8-18 x 5/16 Hex hd self-top-screw flat washer attached stat bronze (2 join S-54500 & 57-3519)	.03
78-346	Five contact socket	.20	114-801	8-18 x 5/16 x 1/4 Hex hd self-top-screw stat bronze (2 used on each S-64619, S-64625, S-64626, & 12-3888 and 4 used on each S-64624 & 12-3884 and 1 used on 57-3519)	.03
78-1099	Three contact socket	.20	114-804	8-18 x 1/2 Hex hd self-tap-screw flat washer attached stat bronze (4 used on S-64706)	.03
78-1169	Noval molded socket	.40	125-116	Rubber grommet (3 req'd)	.05
78-1311	Wafer socket (12BA6 - V6)		126-797	Tube shield (6GQ7)	.10
78-1333	Noval wafer socket (6GQ7)		126-804	Tube shield	.10
78-1560	Wafer socket (12BA6) (2 req'd)	.35	149-211	Iron core (1 part of each S-54155 & S-54156)	.10
78-1561	Wafer socket (12AU6)	.35	149-294	Iron core & spring (3 req'd)	.50
78-1562	Noval wafer socket (6EA8 - 12AX7A) (2 req'd)	.35	188-232	Clamping ring (5 req'd)	.03
78-1563	Noval wafer socket (6BN8)	.35	188-293	Retaining ring	.05
78-1564	Wafer socket (12BE6)	.35	199-183	Shielded paper sleeve	.03
80-1140	Tension spring (pointer)	.10	S-13871	FM detector coil assembly	1.25
80-1188	Tension spring (gang)	.10	S-14192	FM antenna coil assembly	1.25
80-1467	Retaining spring	.05	S-52359	FM oscillator coil assembly	1.00
80-1521	Compression spring	.05	S-53205	Shield & Terminal strip assembly	.15
80-1534	Shaft tension spring		S-53700	Tuner cover & spring assembly	.50
83-1475	Armitite strip (2 req'd)	.03	S-54155	AM oscillator coil assembly	1.25
83-2538	Three lug terminal strip (3 req'd)	.10	S-54156	Detector coil assembly	1.25
83-2639	Three lug terminal strip	.05	S-54500	Antenna assembly	2.50
83-2649	Two lug terminal strip	.05	S-61711	Pointer support strip & ring assembly (2 req'd)	.10
83-3265	Five lug terminal strip	.10	S-62551	Drive cord & eyelet assembly	.15
83-3561	Antenna cable retaining strip	.05	S-62552	Drive cord & eyelet assembly (gang)	.15
83-3675	Twelve lug terminal strip	.30	S-64619	Tone control bracket assembly	
83-3676	Four lug terminal strip	.10	S-64624	Chassis mtg bracket assembly	
83-3783	Single lug terminal strip	.05	S-64625	Bracket & pulley assembly	
83-4125	Three lug terminal strip	.10	S-64626	Bracket & pulley assembly	
83-4530	Thirteen lug terminal strip	.35	S-64644	Drive cord & eyelet assembly (gang)	
83-4822	Four lug terminal strip		S-64645	Drive cord & eyelet assembly	
85-808	Bandswitch		S-64706	FM tuner assembly	
86-312	Terminal	.03			
86-331	Insulated feed thru terminal	.05			
86-388	Terminal (4 req'd)	.05			
86-389	Terminal (9 req'd)	.03			
93-127	#1210 internal tooth lockwasher (1 used on each 19-306)				
93-1522	Spring washer (used on 100-325)	.03			
94-613	Iron core bushing (3 part of S-64796)	.10			
94-812	Coil Insert (1 part of each S-54155 & S-54156)	.05			
95-1900	1st IF transformer (FM)	2.50			
95-1915	1st IF transformer (AM)	2.50			
95-1917	3rd IF transformer (AM)	2.50			
95-1919	2nd & 3rd IF transformer (FM) (2 req'd)	2.50			

PART NO.	DESCRIPTION	PRICE	PART NO.	DESCRIPTION	PRICE
<b>CHASSIS 10L23</b>					
12-3249	Variable capacitor mtg bracket	.05	63-1786	1000 ohm resistor - 1/2W 20%	
12-3892	Escutcheon mounting bracket (RH)			(2 req'd)	.17
17-1 81	Cable clamp	.03	63-1792	1500 ohm resistor - 1/2W 10%	.17
19-306	Coil mounting clip (2 req'd)	.10	63-1803	2700 ohm resistor - 1/2W 10%	.17
19-440	Dial crystal retaining clip (2 req'd)	.10	63-1806	3300 ohm resistor - 1/2W 10%	
19-446	Dial scale retaining clip	.03		(4 req'd)	.17
22-3	.01 mfd disc capacitor - 500V (10 req'd)	.30	63-1820	6800 ohm resistor - 1/2W 10%	
22-5	100 mmfd disc capacitor - 500V	.25	63-1824	(2 req'd)	.17
22-7	.001 mfd disc capacitor - 500V	.26	63-1831	8200 ohm resistor - 1/2W 10%	.17
22-1 3	.0033 mfd disc capacitor - 500V (3 req'd)	.25	63-1834	12K ohm resistor - 1/2W 10%	.17
22-1 8	.0022 mfd disc capacitor - 500V (2 req'd)	.25	63-1835	15K ohm resistor - 1/2W 10%	.17
22-2 7	.0025 mfd disc capacitor	.25	63-1842	15K ohm resistor - 1/2W 20%	.17
22-2 072	.022 mfd capacitor - 400V (2 req'd)	.26	63-1852	22K ohm resistor - 1/2W 20%	.17
22-2 370	50 mmfd disc capacitor	.25	63-1855	39K ohm resistor - 1/2W 10%	.17
22-2 883	50 mfd electrolytic capacitor	1.10	63-1856	47K ohm resistor - 1/2W 10%	.17
22-2 939	680 mfd disc capacitor	.25		47K ohm resistor - 1/2W 20%	
22-3 140	270 mmfd disc capacitor (2 req'd)	.30	63-1859	(3 req'd)	.17
22-3 177	390 mmfd disc capacitor (2 req'd)	.25	63-1866	56K ohm resistor - 1/2W 10%	
22-3 255	330 mmfd disc capacitor - 500V (3 req'd)	.25	63-1869	(2 req'd)	.17
22-3 537	.047 mfd capacitor - 200V (3 req'd)	.30	63-1870	100K ohm resistor - 1/2W 20%	
22-3 591	.1 mfd capacitor - 200V (2 req'd)	.30		(3 req'd)	.17
22-3 616	1.0 mfd electrolytic capacitor - 50V	1.00	63-1880	180K ohm resistor - 1/2W 10%	
22-3 618	10 mfd electrolytic capacitor - 50V	1.25	63-1883	(2 req'd)	.17
22-3 626	.22 mfd capacitor - 100V (2 req'd)	.50	63-1884	220K ohm resistor - 1/2W 20%	
22-3 862	Three section variable capacitor	4.50		(2 req'd)	.17
22-3 996	Electrolytic capacitor		63-1890	330K ohm resistor - 1/2W 10%	.17
43-5 74	Contact housing	.35	63-1911	1 Megohm resistor - 1/2W 10%	
46-3 512	Push button - AM	.35		(2 req'd)	.17
46-3 513	Push button - FM	.35	63-1912	1 Megohm resistor - 1/2W 20%	
46-3 514	Push button - FM - AFC	.35		(4 req'd)	.17
46-3 515	Push button - phono	.35	63-1915	1.2 Megohm resistor - 1/2W 10%	
46-3 517	Push button - T.V.			(2 req'd)	.17
52-1 116	2 conductor shielded cable		63-1925	2.2 Megohm resistor - 1/2W 10%	.17
52-1 117	2 conductor shielded cable		63-1926	2.2 Megohm resistor - 1/2W 20%	.17
54-5 04	Tinnerman speed nut (used on S-60934)	.03	63-1940	4.7 Megohm resistor - 1/2W 20%	
54-5 41	Palnut (1 used on 19-440 & 2 used on 83-4535)	.03		(2 req'd)	.17
54-5 49	Tinnerman speed nut (2 used on 192-319)	.03	63-1954	10 Megohm resistor - 1/2W 20%	.17
54-5 49			63-4880	Potentiometer	1.40
57-3 519	Antenna mtg plate	.10	63-5272	1250 ohm resistor - 10W 10%	
57-4 372	Dial scale background plate	2.00		(2 req'd)	
57-4 373	Chassis bottom plate	1.00	63-5273	4000 ohm resistor - 7W 10%	
57-4 374	Trim plate	1.50	63-6091	3300 ohm resistor - 1W 10%	
57-4 380	Die cast escutcheon		63-6129	27K ohm resistor - 1W 10%	.25
59-5 47	Dial pointer	.60	68-39	68-39	.50
63-1 736	68 ohm resistor - 1/2W 10% (2 req'd)	.17	71-139	Tuning wrench	
63-1 743	100 ohm resistor - 1/2W 10% (2 req'd)	.17		8/32 x 3/8 Phillips flat hd mach screw - stat. bronze (8 used on 57-4373)	.03
63-1 744	100 ohm resistor - 1/2W 20% (2 req'd)	.17	78-346	Five contact socket	.20
63-1 747	120 ohm resistor - 1/2W 10%	.17	78-1099	Three contact socket	.20
63-1 758	220 ohm resistor - 1/2W 20% (4 req'd)	.17	78-1311	Wafer socket (12BA6-V6)	
63-1 778	680 ohm resistor - 1/2W 10%	.17	78-1360	Pilot light socket	.25
63-1 785	1000 ohm resistor - 1/2W 10% (2 req'd)	.17	78-1333	Noval wafer socket (6GQ7)	
			78-1560	Wafer Socket (12BA6-V2-V3)	
			78-1561	(2 req'd)	.35
			78-1562	Wafer socket (12AU6)	.35
			78-1563	Noval wafer socket (6EA8-12AX7A)	.35
				Noval wafer socket (6BN8)	.35

PART  
NO.

DESCRIPTION

PRICE

PART  
NO.

DESCRIPTION

PRICE

CHASSIS 10L23 **Continued**

78-1564	Wafer socket (12BE6)	.35	114-77	6-20 x 5/16 x 1/4 hex hd self-tap-screw - stat. bronze (3 used on 57-4372)	.03
78-1602	Noval wafer socket (12AX7A)				
80-1140	Tension spring (pointer)	.10	114-390	8-18 x 7/16 x 1/4 hex hd self-tap-screw - stat. bronze (4 used on 57-4380)	.03
80-1188	Tension spring (gang)	.10			
83-1475	Insulating strip	.03	114-564	8-18 x 5/16 hex hd self-tap-screw - flat washer attached - stat. bronze (2 used on S-54500)	.03
83-2538	Three lug terminal strip	.10			
83-2612	Two lug terminal strip	.05	114-654	6-20 x 3/8 x 1/4 hex hd self-tap-screw - stat. bronze (2 used on S-60926)	.03
83-2639	Three lug terminal strip (3 req'd)	.05	114-801	8-18 x 5/16 x 1/4 hex hd self-tap-screw - stat. bronze (1 used on 57-3519 & 4 used on each S-60927 & 12-3892)	.03
83-3561	Cable retaining strip	.05	114-804	8-18 x 1/2 hex hd self-tap-screw - flat washer attached - stat. bronze (4 used on S-6 1017)	.03
83-3675	Twelve lug terminal strip	.30			
83-3676	Four lug terminal strip	.10	114-901	6-20 x 7/16 hex hd self-tap-screw - flat washer attached - stat. bronze (4 used on S-6 0934)	.03
83-4530	Thirteen lug terminal strip	.35			
83-4533	Rubber channel strip (top & bottom) (2 req'd)	.25	125-117	Rubber grommet (1 used on each 114-804)	.03
83-4534	Rubber channel strip (sides) (2 req'd)	.10	126-797	Tube shield (6GQ7)	.10
83-4535	Dial crystal retainer (2 req'd)	.50	126-1048	Pilot light shield	.10
83-4543	Rubber spacer (2 req'd)	.03	149-211	Iron core (1 part of each S-54155 & S-54156)	.10
83-4822	Four lug terminal strip		188-177	Retaining ring (1 used on each 94-1259 & S-60575)	.03
83-4851	5 lug terminal strip		188-322	Retaining ring (1 part of each S-60929)	.03
85-827	Push button bandswitch		192-319	Dial crystal	.60
86-312	Shakeproof terminal	.03	199-183	Shielded paper sleeve	.03
86-388	Connector terminal (2 req'd)	.05	S-54155	Oscillator coil assembly (BC)	1.25
86-389	Terminal, female (9 req'd)	.03	S-54156	Detector coil assembly (BC)	1.25
93-127	#1210 Internal shakeproof lock-washer (1 used on each 19-306)	.03	S-54500	Antenna assembly	2.50
93-898	.032 x .323 x 5/8 steel washer (used on S-60928)	.03	S-60575	Knob & ring assembly - turning	2.00
93-1522	Spring washer (used on S-60928)	.03	S-60922	Drive cord & eyelet assembly (pointer)	.15
93-1580	1/32 x .171 x .296 steel washer (spacer) black oxide (1 joins S-60934 & 57-4372)	.03	S-60923	Drive cord & eyelet assembly (pointer)	.15
94-812	Coil insert (1 part of each S-54155 & S-54156)	.05	S-60926	Pulley & bracket assembly	.50
94-1249	Shaft bushing	.25	S-60927	Escutcheon mtg bracket assembly (L.H.)	1.00
95-1915	1st I.F. transformer - AM	2.50	S-60928	Neon bulb & terminal assembly	1.50
95-1917	3rd I.F. transformer - AM	2.50	S-60929	Pointer support & ring assembly (2 req'd)	.10
95-1919	2nd & 3rd I.F. transformer - FM (2 req'd)	2.50	S-60930	Escutcheon assembly	15.00
95-1920	Ratio detector transformer	2.50	S-60934	Dial scale & channel strip assembly	6.00
95-1924	2nd I.F. transformer	2.50	S-61017	FM tuner assembly	30.00
95-2073	Input mixer transformer	2.50	S-62251	Drive cord & eyelet assembly (gang)	1.15
95-2075	Detector mixer transformer	2.50	S-62552	Drive cord & eyelet assembly (gang)	.15
95-2076	Doublet mixer transformer	4.50		Escutcheon mtg. bracket assembly (R.H.)	
95-2078	Trap coil	2.50			
100-249	Pilot light bulb	.18			
100-275	Neon bulb & wire	1.25			
103-23	Crystal diode (2 req'd)	.75			
105-42	R/C network	.50			
105-50	R/C network (2 req'd)	.90			
113-8	6-32 x 1/4 x 1/4 hex hd mach screw (3 used on 22-3862)	.03			
113-34	6-32 x 3/8 x 1/4 hex hd mach screw (external shakeproof lock-washer) (2 mt. 85-827)	.03			
114-26	8-18 x 1/4 x 1/4 hex hd self-tap-screw - stat. bronze (2 used on 12-3249)	.03			

PART  
NO.

## DESCRIPTION

## PRICE

PART  
NO.

## CHASSIS 11L8T25

## PRICE

12-3684	On-off switch mtg bracket	46-3560	Push button - monaural	.50
12-3685	Pulley bearing bracket	46-3565	Push button (push-on, push-off)	.50
12-3686	Front bracket - indicator light (3 req'd)	52-1063	Two conductor shielded lead	.60
12-3691	Switch mtg bracket	52-1064	Two conductor shielded lead	.75
12-3687	Variable capacitor mtg bracket	52-1067	Two conductor shielded lead	.75
17-149	Clamp (3 req'd)	.05	Two conductor shielded lead	.50
19-306	Coil mtg clip (2 req'd)	.10	3/8-32 x 9/16 palnut (4 req'd)	.05
19-451	Tinnerman clip		Palnut (2 used on each 80-1681 & 1 used on each 80-1682)	.03
22-2	220 mmf disc capacitor - 500V	.25	Tinnerman speed clip	.03
22-3	.01 mfd disc capacitor - 500V (15 req'd)	.30	Chassis bottom plate	2.00
22-12	.0015 mfd disc capacitor - 500V	.25	Dial scale background plate	2.50
22-13	.0033 mfd disc capacitor - 500V (5 req'd)	.25	Indicator light backing plate (3 req'd)	.05
22-17	.001 mfd disc capacitor - 1000V (2 req'd)	.25	Dial Pointer	.35
22-18	.0022 mfd disc capacitor - 500V (2 req'd)	.25	Tone control pulley (3 req'd)	.30
22-1778	.047 mfd capacitor - 200V (2 req'd)	.30	100 ohm resistor - 1/2W 20% (3 req'd)	.17
22-1850	.015 mfd capacitor - 200V (2 req'd)	.	150 ohm resistor - 1/2W 10%	.17
22-2671	25 mmf disc capacitor - 500V	.25	680 ohm resistor - 1/2W 20%	.17
22-2703	220 mmf disc capacitor - 500V	.25	1000 ohm resistor - 1/2W 10%	.17
22-2726	50 mfd electrolytic capacitor - 10V (2 req'd)	1.50	(2 req'd)	.17
22-2863	33 mmf disc capacitor - 500V	.25	1000 ohm resistor - 1/2W 20%	.17
22-2939	680 mmf disc capacitor	.25	1200 ohm resistor - 1/2W 10%	.17
22-3010	.01 mfd disc capacitor - 25V (2 req'd)	.45	(2 req'd)	.17
22-3133	10 mfd electrolytic capacitor 300V	1.75	1500 ohm resistor - 1/2W 10%	.17
22-3255	330 mmf disc capacitor - 500V (3 req'd)	.25	2200 ohm resistor - 1/2W 10% (2 req'd)	.17
22-3362	560 mmf disc capacitor - 500V (3 req'd)	.25	2700 ohm resistor - 1/2W 10%	.17
22-3363	470 mmf disc capacitor - 500V	.25	3300 ohm resistor - 1/2W 10%	.17
22-3616	1.0 mfd electrolytic capacitor - 50V	1.00	3900 ohm resistor - 1/2W 10% (4 req'd)	.17
22-3618	10 mfd electrolytic capacitor - 50V	1.25	4700 ohm resistor - 1/2W 10% (2 req'd)	.17
22-3626	.22 mfd capacitor - 100V (6 req'd)	.50	5600 ohm resistor - 1/2W 10% (2 req'd)	.17
22-3630	.068 mfd capacitor - 50V (2 req'd)		6800 ohm resistor - 1/2W 10% (2 req'd)	.17
22-3678	.047 mfd capacitor - 100V (2 req'd)	.25	7500 ohm resistor - 1/2W 5% (4 req'd)	.34
22-3687	1 mfd electrolytic capacitor - 50V (4 req'd)		8200 ohm resistor - 1/2W 10%	.17
22-3865	Three section variable capacitor	4.50	10K ohm resistor - 1/2W 10% (9 req'd)	.17
22-3883	50 mfd electrolytic capacitor - 50V (2 req'd)	1.25	10K ohm resistor - 1/2W 20% (2 req'd)	.17
22-3889	50 mmf disc capacitor	.15	15K ohm resistor - 1/2W 10% (3 req'd)	.17
22-3891	.0068 mfd capacitor - 100V (2 req'd)	.30	15K ohm resistor - 1/2W 20% 18K ohm resistor - 1/2W 10%	.17
22-3892	.01 mfd capacitor - 100V (4 req'd)	.30	22K ohm resistor - 1/2W 10%	.17
22-3893	1 mfd capacitor - 100V (2 req'd)	1.50	22K ohm resistor - 1/2W 20%	.17
22-3896	5 mfd electrolytic capacitor - 25V (6 req'd)	1.00	27K ohm resistor - 1/2W 10% (2 req'd)	.17
22-4110	.033 mfd capacitor - 200V (2 req'd)		33K ohm resistor 1/2W 10% (2 req'd)	.17
43-570	Male contact housing	.45	39K ohm resistor 1/2W 10%	.17
43-571	Male contact housing	.30	47K ohm resistor - 1/2W 10% (5 req'd)	.17
44-48	Connector jack (2 part of S-54151)	.20	56K resistor - 1/2W 10%	.17
46-3553	Push button FM-AFC	.50	68K ohm resistor - 1/2W 10% (4 req'd)	.17
46-3554	Push button - FM - AFC	.50	100K ohm resistor - 1/2W 10% (2 req'd)	.17
46-3555	Push button - AM	.50	100K ohm resistor - 1/2W 20% (6 req'd)	.17
46-3556	Push button - phono	.50		
46-3557	Push button - tape	.50		
46-3558	Push button - ext. stereo	.50		
46-3559	Push button - stereo	.50		

PART NO.	DESCRIPTION	PRICE	PART NO.	DESCRIPTION	PRICE
<b>CHASSIS 11L8T25 Continued</b>					
63-1873	120K ohm resistor - 1/2W 10% (2 req'd)	.17	83-4337	Three lug terminal strip	.10
63-1876	150K ohm resistor - 1/2W 10% (5 req'd)	.17	83-4537	Trim strip - escutcheon (part of S-61713)	
63-1880	180K ohm resistor - 1/2W 10%	.17	83-4543	Center bar rubber strip (3 req'd)	.03
63-1883	220K ohm resistor - 1/2W 10% (3 req'd)	.17	83-4565	Rubber channel strip (2 req'd)	.05
63-1898	470K ohm resistor - 1/2W 20% (4 req'd)	.17	83-4566	Rubber channel strip (2 req'd)	.20
63-1905	680K ohm resistor - 1/2W 20% (3 req'd)	.17	83-4635	Switch sock mtg strip (2 req'd)	.05
63-1911	1 megohm resistor - 1/2W 10%	.17	85-807	AC switch	1.50
63-1912	1 megohm resistor - 1/2W 20% (3 req'd)	.17	85-781	Push button bandswitch	15.00
63-1915	1.2 megohm resistor - 1/2W 10%	.17	86-328	Wire retaining terminal (3 req'd)	.03
63-1925	2.2 megohm resistor - 1/2W 10%	.17	86-344	Connector terminal (2 req'd)	.03
63-1926	2.2 megohm resistor - 1/2W 20% (2 req'd)	.17	86-388	Connector terminal (2 req'd)	
63-1929	2.7 megohm resistor - 1/2W 10%	.17	86-390	Connector terminal (15 req'd)	.03
63-1961	15 megohm resistor - 1/2W 20% (3 req'd)	.17	93-898	.032 x .323 x 5/8 steel washer	
63-4880	Potentiometer	1.40	93-1522	Spring washer (used on S-61721)	.03
63-5131	Treble control	2.75	93-1580	Spacer washer	.03
63-5146	Loudness control	3.50	93-1595	Felt washer	.03
63-5147	Bass control	2.75	94-812	Coil insert (1 part of each S-54155 & S-54156)	.05
63-5213	Presence control	3.00	94-1248	Shaft bushing	.35
63-6101	5600 ohm resistor - 1W 10%	.25	95-1915	1st IF transformer (AM)	2.50
63-6129	27K ohm resistor - 1W 10%	.25	95-1916	2nd IF transformer (AM)	2.50
68-39	Tuning wrench	.50	95-1917	3rd IF transformer (AM)	2.50
78-1089	Molded tube socket (part of S-61671)	.25	95-1918	4th IF transformer (FM)	2.50
78-1099	Three contact socket (part of S-61675)	.20	95-1919	2nd & 3rd IF transformer (F M) (2 req'd)	.250
78-1223	Transistor socket (8 req'd)	.35	95-1920	Ratio detector transformer	2.50
78-1512	Dual pilot light socket	.60	95-2073	Input mixer transformer	2.50
78-1560	Wafer socket (6BA6)	.35	95-2075	Detector mixer transformer	2.50
78-1562	Noval wafer socket (6EA8)	.35	95-2076	Doubler mixer transformer	4.50
78-1563	Noval wafer socket (6BN8)	.35	95-2078	Trap coil transformer	
78-1564	Wafer socket (6BF6)	.35	100-249	Pilot light bulb (5 req'd)	.18
78-1569	Indicator light & wire (3 req'd)	.50	103-34	Crystal diode (2 req'd)	1.00
78-1576	Noval wafer socket (6GQ7)	.35	105-50	R/C network (2 req'd)	.90
78-1577	Wafer socket (6BA6)	.35	113-8	6-32 x 1/4 x 1/4 AF hex hd mach screw - internal shakeproof lock-washer (3 used on 22-3865 & 2 used on 85-780)	.03
78-1578	Wafer socket (6BN6)	.35	114-344	6-20 x 1/4 x 1/4 Hex hd self-tapping screw statuary bronze (5 mt 57-3515 & 2 mt 126-1051 & one mts S-61671)	.03
78-1579	Wafer socket (6AU6)	.35	114-390	8-18 x 7/16 x 1/4 AF hex hd self-tapping screw statuary bronze (6 mt S-61713)	.03
78-1580	Noval wafer socket	.35	114-594	8-18 x 3/8 Hex hd self-tapping screw - flat washer attached - statuary bronze - (2 req'd)	.03
80-1188	Tension spring (gang)	.10	114-801	8-18 x 5/16 x 1/4 AF Hex hd self-tapping screw - statuary bronze (22 req'd)	.03
80-1681	Glass retaining spring (2 req'd)	.20	114-804	8-18 x 1/2 Hex hd self-tapping screw - statuary bronze - flat washer attached - (4 mt S-61363)	.03
80-1682	Glass retaining spring (top) (2 req'd)	.05	114-813	6-20 x 3/8 x 1/4 Hex hd self-tapping screw (4 used on S-62368)	.03
80-1683	Tone pulley tension spring (3 req'd)	.20	114-822	6-20 x 1/4 x 1/4 Hex hd self-tapping screw (4 used on S-62368)	.03
80-1718	Tension spring (pointer)	.15	121-273	Transistor - pre-amp (4 req'd)	.80
80-1734	Tuning tube retaining spring		121-274	Transistor - pre-amp (2 req'd)	.80
83-1475	Cable retaining strip (5 req'd)	.03	121-275	Transistor - pre-amp (2 req'd)	.88
83-2145	Five lug terminal strip	.10	125-117	Rubber grommet (4 req'd)	.03
83-2216	Seven lug terminal strip		125-130	Rubber grommet	.03
83-2649	Two lug terminal strip (3 req'd)	.05			
83-3025	Rubber strip	.03			
83-3670	Six lug terminal strip (2 req'd)	.15			
83-3671	Five lug terminal strip (2 req'd)	.15			
83-3672	Eight lug terminal strip (2 req'd)	.20			
83-3674	Seven lug terminal strip (3 req'd)	.20			
83-3676	Four lug terminal strip (3 req'd)	.10			
83-4332	Wire tie down strip	.03			

PART NO.	DESCRIPTION	PRICE	PART NO.	DESCRIPTION	PRICE
<b>CHASSIS 11L8T25 Continued</b>					
126-797	Tube shield (1 used on each 6EQ7 & 6GQ7)	.10	S-61500	Knob & ring assembly - bass	1.00
126-1046	Hum shield	.60	S-61501	Knob & ring assembly - treble	1.00
126-1048	Pilot light shield (2 req'd)	.10	S-61502	Knob & ring assembly - presence	1.00
126-1050	Tone indicator background shield	.50	S-61503	Knob & ring assembly - loudness	1.50
126-1051	Transistor shield	.50	S-61504	Knob & ring assembly - balance	.30
149-211	Iron coil (1 part of each S-54155 & S-54156)	.10	S-61648	Antenna cable & terminal	.25
188-54	Knob clamping ring (part of S-61503)	.03	S-61671	Bracket & socket	.60
188-120	Knob clamping ring (part of S-61504)	.03	S-61675	Escutcheon mtg bracket - (RH)	
188-177	Knob clamping ring (1 part of each S-61499, S-61500, S-61501, & S-61502 and one used on 94-1248)	.03	S-61710	Escutcheon mtg bracket - (LH)	
188-232	Clamping ring (1 part of each S-61711)	.03	S-61711	Pointer support & ring (2 req'd)	.10
188-367	Clamping ring (4 part of S-61712)	.03	S-61712	Tone indicator & ring assembly	3.50
192-320	Dial crystal	.60	S-61713	Escutcheon	
199-263	Shielded paper sleeve	.10	S-61714	Tone indicator mtg bracket	
199-299	Shielded paper sleeve	.05	S-61718	Shield & lens - bass	.50
199-398	Shielded paper sleeve		S-61719	Shield & lens - treble	.50
S-18812	Antenna loading coil	.80	S-61720	Shield & lens - presence	.50
S-47742	Drive cord & eyelet - treble - 19-1/8"	.20	S-61721	Neon bulb & terminal	1.50
S-54151	Antenna strip & bracket	1.00	S-61727	Drive cord & eyelet (gang) - 18-3/4"	.15
S-54155	Oscillator coil (BC)	1.25	S-61728	Drive cord & eyelet (gang) - 11-1/8"	.15
S-54156	Detector coil (BC)	1.25	S-61729	Drive cord & eyelet (treble) - 41-1/2"	.15
S-61363	FM tuner	30.00	S-61730	Drive cord & eyelet (bass) - 23"	.15
S-61499	Knob & ring assembly - tuning	2.00	S-61731	Drive cord & eyelet (presence) - 16-1/8"	.15

### FM TUNER S-61017 PARTS

12-3195	Coil support bracket	.15	80-1521	Compression spring	.05
22-1888	.001 ceramic capacitor 500V	.25	80-1534	Shaft tension spring	
22-2374	6 mmf disc capacitor 500V	.25	83-3783	Single lug terminal strip (part of S-53205)	.05
22-2550	30 mmf disc capacitor 500V	.25	86-331	Insulated feed-thru terminal	.05
22-2676	0.51 mmf gimmick capacitor 500V	.25	94-613	Iron core bushing (3 req'd)	.10
22-2732	1000 mmf feed-thru capacitor 500V (5 req'd)	.30	95-1900	1st I.F. transformer (FM) 10.7 mc	2.50
22-2896	16 mmf disc capacitor 500V	.25	103-39	Silicon diode	3.00
22-3010	.01 mfd disc capacitor 25V	.45	or		
22-3232	25 mmf disc capacitor 500V	.25	103-47	Silicon diode	
22-3270	22 mmf feed-thru capacitor 500V (2 req'd)	.25	113-26	6-32 x 1/4 x 1/4 Hex hd mach	
22-3456	2 x 12 Mmf disc capacitor	.30		screw - external lockwasher	
22-3621	22 Mmf disc capacitor 500V	.25	125-116	attached (2 used on 12-3195)	.03
56-426	Roll pin (4 req'd)	.05	126-804	Grommet (3 req'd)	.05
63-1845	27K ohm resistor 1/2W 10%	.17	148-189	Tube shield	.10
63-1869	100K ohm resistor 1/2W 10%	.17	149-294	Tuner guide arm	
63-1870	100K ohm resistor 1/2W 20%	.17	188-232	Iron core and spring (3 req'd)	.50
63-1939	4.7 megohm resistor 1/2W 10%	.17	188-293	Clamping ring (3 req'd)	.03
76-1154	Guide shaft	.35	S-13871	Retaining ring	.05
76-1167	Guide shaft	.30	S-14192	FM detector coil	1.00
76-1371	Drive shaft		S-52359	FM Antenna coil	.90
76-1375	Drive shaft on S-61363 only		S-53205	FM oscillator coil	.75
78-1169	Noval molded socket (6JK8)	.40	S-53700	Shield and terminal strip	.15
80-1467	Retaining spring	.05		Tuner cover and spring	.50

PART NO.	DESCRIPTION	PRICE	PART NO.	DESCRIPTION	PRICE
<b>REMOTE SPEAKER KR102W</b>					
2-1484	Cabinet back		83-2145	Five lug terminal strip (part of S-50862)	.10
14-4672	Table cabinet		85-680	Three position switch	2.50
16-2302	Packing carton		86-333	Connector terminal (4 req'd)	.03
22-3196	Electrolytic capacitor 80/25V (2 req'd)	2.00	95-1701	Audio choke (part of S-50862)	2.50
46-2614	Switch knob	.25	112-1265	6-32 x 1-1/4 speaker mounting screw (2 part of 14-4672)	.05
49-978	3-1/2" PM speaker	4.75	112-1269	8-32 x 1-7/16 speaker mounting screw (4 part of 14-4672)	.10
49-984	6" x 9" PM speaker		114-453	6-18 x 5/8 Hex washer hd self-tap screw (4 mt 2-1484)	.10
54-139	3/8 x 32 x 9/16 Hex palnut	.03	114-701	8-15 x 3/8 Hex washer hd self-tap screw (3 req'd)	.03
54-385	6-32 x 5/16 Hex nut (1 used on each 112-1265)	.03	125-100	Strain relief grommet	.15
54-424	8-32 x 11/32 Hex palnut washer (1 used on each 112-1269)	.03	S-50862	Filter mounting plate assembly	3.50
54-469	Tinnerman speed nut (part of 14-4672)	.10	GRC130-1	Grille cloth (part of 14-4672)	
57-2816	Nameplate (part of 14-4672)	.35			
58-226	Five prong plug	.15			

## REMOTE SPEAKER KR105W

2-1485	Cabinet back		83-2145	Five lug terminal strip (part of S-50862)	.10
14-4673	Table cabinet		85-680	Three position switch	2.50
16-2303	Packing carton		86-270	Terminal (2 part of S-26657)	.03
22-2945	Electrolytic capacitor 3/30V	1.25	86-333	Connector terminal (6 req'd)	.03
22-3196	Electrolytic capacitor 80/25V (2 req'd)	2.00	95-1701	Audio choke (part of S-50862)	2.50
46-2614	Switch knob	.25	112-1265	6-32 x 1-1/4 Speaker mounting screw (4 part of 14-4673)	.05
49-867	Horn tweeter speaker	30.00	112-1269	8-32 x 1-7/16 Speaker mounting screw (4 part of 14-4673)	.10
49-984	6" x 9" PM speaker		114-453	6-18 x 5/8 Hex washer hd self-tap screw (4 mt 2-1485)	.10
52-929	Speaker cable	.25	114-701	8-15 x 3/8 Hex washer hd self-tap screw (3 req'd)	.03
54-139	3/8-32 x 9/16 Hex palnut (used on 85-680)	.03	125-100	Strain relief grommet	.15
54-385	6-32 x 5/16 Hex nut (1 used on each S-26657 & 112-1265)	.03	S-26657	Terminal strip	.20
54-424	8-32 x 11/32 Hex palnut (1 used on each 112-1269)	.03	S-50859	Cable and plug assembly	2.25
54-469	Tinnerman speed nut (part of 14-4673)	.10	S-50862	Filter mounting plate	3.50
57-2816	Nameplate (part of 14-4673)	.35	GRC103-2	Grille cloth (part of 14-4673)	
58-176	Five prong plug (part of S-50859)	.30			

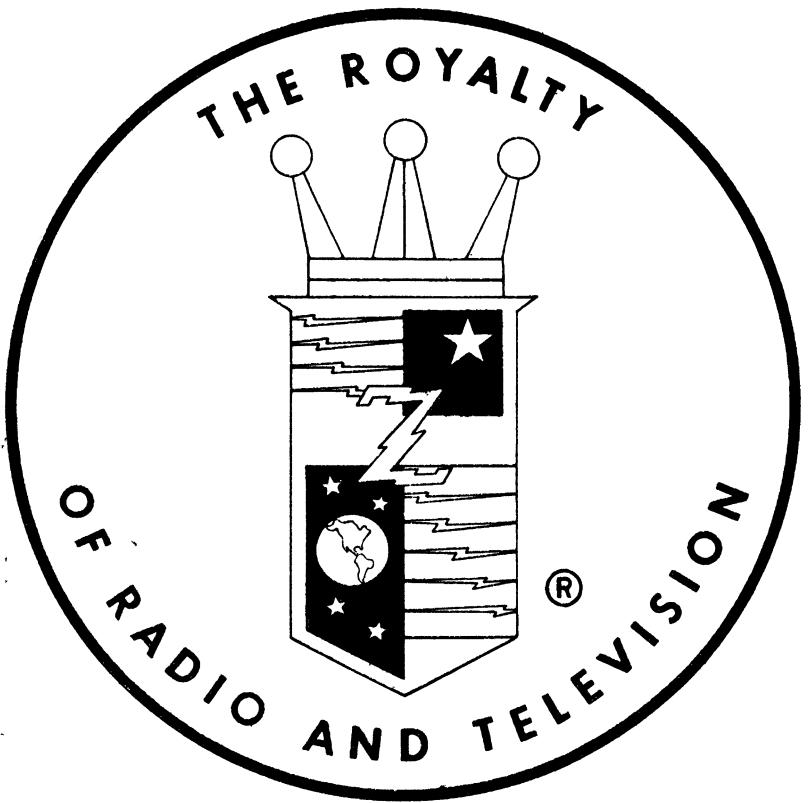
## CHASSIS KPS70C

22-1814	.0022 mfd Molded capacitor 600V (2 req'd)	.30	63-3992	68K ohm Resistor 1/2W 10%	.17
22-1843	.01 mfd Capacitor 600V (2 req'd)	.30	(2 req'd)		
22-2586	.0015 mfd Capacitor 600V (2 req'd)	.25	63-4019	39K ohm Resistor 1/2W 10%	.17
22-2634	.047 mfd Capacitor 400V (2 req'd)		(2 req'd)		
22-2766	47 mmf Capacitor 600V (2 req'd)	.70	63-4482	100K ohm Resistor 1/2W 10%	.17
22-2945	3 mfd Electrolytic capacitor - Non-Pole 30V (2 req'd)	1.25	(2 req'd)		
WC-16435	Electrolytic capacitor 150/150 40/150 20/15	3.50	WC-12877	33 ohm Resistor 1W 10%	.25
63-949	2200 ohm Resistor 1W 10%	.25	WC-14132	Fusing type resistor 47 ohm 3W	.50
63-1771	470 ohm Resistor 1/2W 10% (2 req'd)	.17	WC-13229	Bass Tone control (5 megohm)	2.50
63-1883	220K ohm Resistor 1/2W 10% (2 req'd)	.17	WC-13501	Balance control (1 megohm)	1.40
			WC-13800	Treble tone control (500K ohm)	2.75
			WC-14027	Rectifier	3.80
			WC-15730	Loudness control (3 megohm)	
			WC-15732	Output transformer (2 req'd)	3.00

## MODELS KPS70C CABINET PARTS

WC-11-792	4" Speaker (2 req'd)	5.00	WC-16380	1/4-20 x 1" Long 7/16 unslotted indented hex hd (2 mt record changer drawer)	.10
WC-12-963	6" Speaker (2 req'd)	8.00	WC-16387	Upper door stop	.25
WC-13-004-A	Catch - remote speaker	.75	WC-16428	Case assembly w/hardware	
WC-13-554	Recessed Nut	.15	WC-16429	Control plate	
WC-14-183-A	Stud - remote speaker	.25	WC-16436-L	Panel (lefthand) with eyelet	
WC-14-184-A	Locator eyelet - stud	.20	WC-16436-R	Panel (righthand) without eyelet	
WC-14-195	Lower door stop	.35	WC-16438-P	Handle - drawer	1.25
WC-14-289	8-32 x 7/8 Bolt (2mt WC-16438-P)		WC-16450-A	Hinge - remote speaker (2 req'd)	.45
WC-14-327	Audio cable - input	1.40	WC-16451-9A	Handle assembly - cabinet	
WC-14-648-8C	Knob assembly (bass-treble- volume) (3 req'd)	.75	WC-16467	Tee Nut (1 retains each WC-16380)	.20
WC-14-649-8C	Knob assembly - balance	.85	WC-16534-A	Handle hardware cap (part of WC-16451-9A)	.50
WC-15-090-X	Logo (name) plate	1.00	WC-16535-A	Trim strip 30" length (part of cabinet)	.75
WC-15-101-9	Support bumper (4 part of main cabinet)	.30	WC-16539	Grille cloth - cabinet speaker only	.50
WC-15-105-9	Support bumper (4 part of remote speaker cabinet)	.25	WC-16540	Grille cloth - remote speaker only	.60
WC-15-435	Nut (1 used on each WC-14289)		19-414	Line cord clip (2 used on cabinet speaker back)	.10
WC-15-445-5	External remote speaker cord - 8 ft. long	1.00	142-126	Dual pickup cartridge (sapphire - sapphire) (part of 169-199)	10.00
WC-15-484-A	Eyelet	.05	169-199	Record changer (see changer parts list for components)	
WC-15-821	Cable clamp (3 req'd)		202-2218	Instruction book	.40
WC-16-226	Lockwasher (1 used on each WC16380)		S-55804	Dual stylus assembly (sapphire - sapphire) (part of 142-126)	2.50
WC-16-358	Spacer (1 used on each WC16380)				
WC-16-374-C	Plug button (2 used on record changer drawer)	.25			





## **ZENITH RADIO CORPORATION**

6001 West Dickens Avenue  
CHICAGO, ILLINOIS 60639